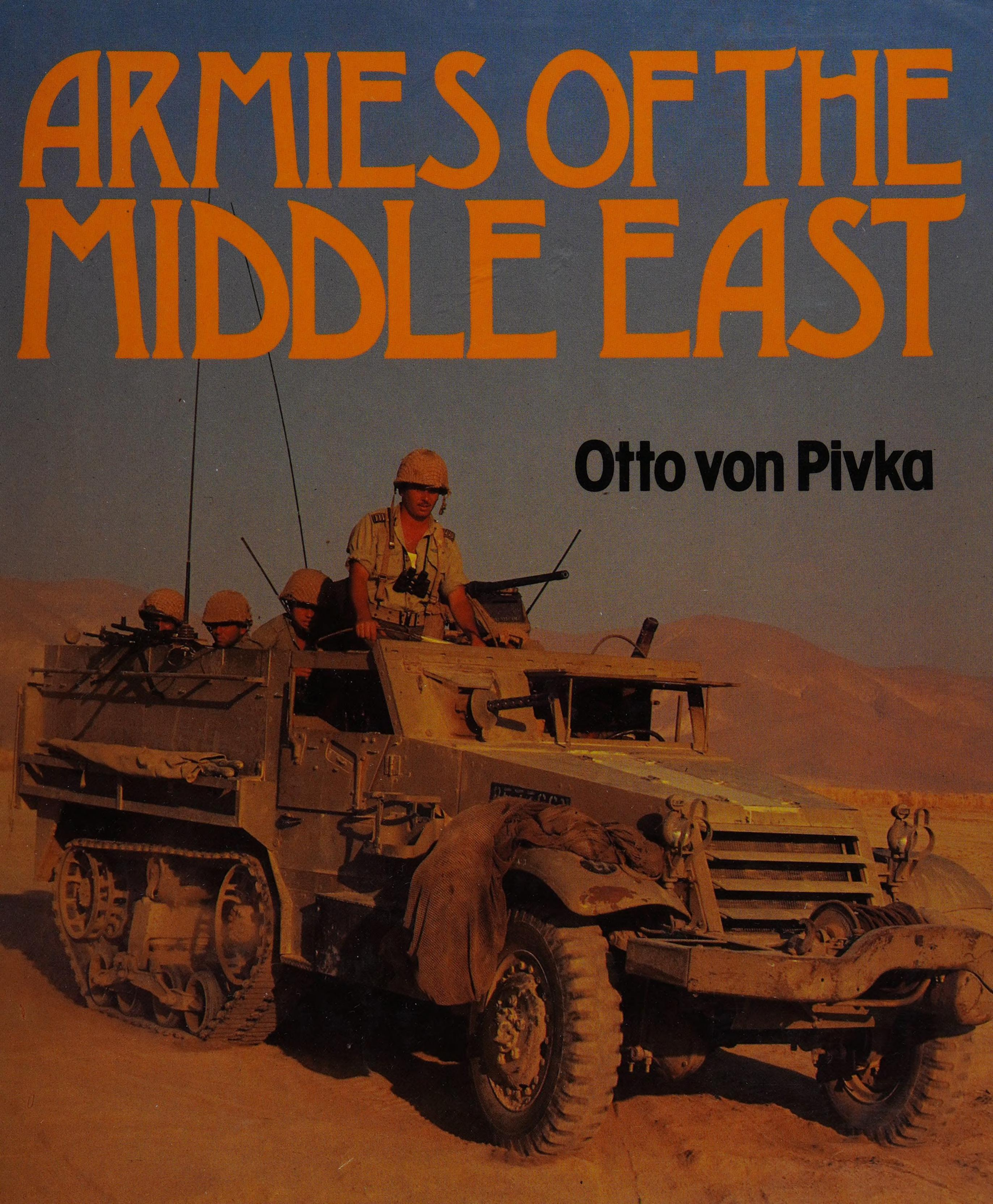
ARMIES OF THE MIDDLE EAST

Otto von Pivka



$12.95

ARMIES OF THE MIDDLE EAST

Palestine—the promised land of Israel or an independent Arab state? Since 1948, when the British mandate ran out, the Jews and Arabs have fought a series of bitter and bloody wars for control of the disputed territory—an area which Britain had, at various times, promised to both of them. After the Suez campaign of 1956 the conflict took an even more serious turn with the super-powers manipulating the two sides in an attempt to settle their own ideological scores. With increasingly sophisticated weapons being used during and since the Six Day and Yom Kippur Wars, the Middle East could yet become the cradle of World War III. Even after 30 years of almost continuous conflict there are few signs of permanent peace. This book covers not only the disputes between Israel and her neighbors but also the independence struggles and civil wars which have beset so many of the Arab states in the area.

Written by an eminent German historian who saw action in North Africa and Russia during World War II and who is an acknowledged expert on military affairs, this book provides both an insight into the political development of the Middle East problem and a valuable commentary on the military conduct of the various campaigns. It will be of the greatest value to general enthusiasts, modellers and wargamers as well as serious students of the subject.

There is a great wealth of detail taken from contemporary source material as well as maps, photographs, color plates and valuable information on weapons, tactics, the relative strength of contending forces and estimated war losses.

Much of the book is devoted to a country-by-country breakdown giving a brief history of each state and its armed forces, their weapons, equipment and uniforms (with drawings of badges and rank insignia).





ARMIES OF THE MIDDLE EAST

Captured T-62, photographed in September 1974 (Sunday Times).



ARMIES OF THE MIDDLE EAST

Otto von Pivka



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CONTENTS

List of abbreviations 6

Section 1

Historic background to the conflict

Introduction 7
1517-1947 7
The 1948 Arab-Israeli war 9
The 1956 Arab-Israeli war 16
The Jebel Akhdar campaign in Oman 19
The Yemeni civil war, 1962-1969 20
The Six Day War, June 5-10 1967 22
The Dhofar campaign in Oman 27
The period 1967-1973 30
Military developments since 1973 46
Political developments since 1973 47
The Ethiopian secessionist wars 48

Section 2

Atlas of the Middle East wars

Illustrating the events and campaigns described in Section 1 53

Section 3

National states and their armed forces

The Democratic and Popular Republic of Algeria 84
Bahrain 86
The Arab Republic of Egypt 86
Ethiopia 91
The Empire of Iran 97
Iraq 103
Israel 110
The Hashemite Kingdom of Jordan 116
Kuwait 118
Lebanon 119
The Libyan Arab Republic 120
The Kingdom of Morocco 122
The Sultanate of Oman 125
Qatar 128
The Kingdom of Saudi Arabia 129
The Somali Democratic Republic 131
The Democratic Republic of the Sudan 133
Syria 134
The Republic of Tunisia 138
The United Arab Emirates 140
The Yemen Arab Republic (North) 142
The People's Democratic Republic of South Yemen 143

Section 4

Weapon characteristics

Armoured fighting vehicle characteristics 145
Small arms, artillery, missiles and other equipment 151
Designations and NATO code names of Russian aircraft 161

Section 5

Recent events

A summary of the latest situation just before this book went to press 162

List of abbreviations

AA Anti-Aircraft.
AAM Air-to-Air Missile.
AFV Armoured Fighting Vehicle.
ALA Arab Liberation Army.
ALF Afar Liberation Army.
Armd Armoured.
ANM Arab Nationalist Movement.
AP Armour Piercing.
APBC Armour Piercing Ballistic Cap.
APC Armoured Personnel Carrier.
APDS Armour Piercing Discarding Sabot.
ARV Armoured Recovery Vehicle.
ASM Air-to-Surface Missile.
ATGW Anti-Tank Guided Weapon.
ATK Anti-Tank.
Bde Brigade.
Bn Battalion.
Bty Battery.
Cdo Commando.
DBS Dhofar Benevolent Society.
DLF Dhofar Liberation Front.
ECM Electronic Counter Measures.
EDU Eritrean Democratic Union, Ethiopian Democratic Union.
ELF Eritrean Liberation Front.
ELF/PLF Eritrean Liberation Front/Popular Liberation Front.
EPLF Eritrean Popular Liberation Front.
FGA Fighter Ground Attack.
gm gramme.
GM Guided Missile.
GPMG General Purpose Machine Gun.
GW Guided Weapon.
HE High Explosive.
HEAT High Explosive Anti-Tank.
HESH High Explosive Squash Head.
HMG Heavy Machine Gun.
HQ Headquarters.
IR Infra red.
Km Kilometre.
LAW Light Anti-Tank Weapon.
LMG Light Machine Gun.
m metre.
MBT Main Battle Tank.
MG Machine Gun.
MICV Mobile Infantry Combat Vehicle.
mm millimetre.
MMG Medium Machine Gun.
MP Military Police or Machine Pistol.
OAU Organisation of African Unity.
OLF Oromo Liberation Front.
PALF People's Armed Liberation Forces.
PFLO Popular Front for the Liberation of Oman.
PFLOAG Popular Front for the Liberation of the Occupied Arab Gulf (pre December 1971), Popular Front for the Liberation of Oman and the Arabian Gulf (post December 1971).
PLO Palestine Liberation Organisation.
PMAC Provisional Military Administrative Council.
Regt Regiment.
rpm revolutions per minute or rounds per minute.
SAF Sultan's Armed Forces (Oman).
SAM Surface-to-Air Missile.
SMG Sub-machine Gun.
SOLF Somali Abo Liberation Front.
SP Self-propelled.
SSM Surface-to-Surface Missile.
SSU Sudanese Socialist Union.
WSLF Western Somalia Liberation Front.

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Section 1

HISTORIC BACKGROUND TO THE CONFLICT

Introduction

The Middle East today is as unstable and dangerous as at any time since the Crusades. The super powers encourage their fighting cocks and try out their military gadgets in the best of conditions. It is potentially the cradle of World War 3.

All participants in the Arab-Israeli wars are understandably obsessed with security and it has proved very difficult to obtain any reliable first-hand information on uniforms, weapons, equipment or campaign history.

The Israelis have published many works on the campaigns but these are always deliberately ambiguous and misleading so as to be almost valueless as source material. One can put together a fairly accurate picture of the conduct, timing and results of the campaigns but it requires much 'reading of entrails' and the drawing of deductions from what is *not* said rather than from official information. A wide selection of international sources has been combed to produce this book.

The potential trouble spots within the area remain, as before, Israel and her neighbours, Libya-Egypt, Morocco-Algeria, Ethiopia (Eritrea and Somalia), Iraq (Kurdistan) and Iran where the widespread riots of May 1978 against the Shah's increasingly unpopular regime showed that conservative Moslem religious leaders were, perhaps unwittingly, adding to the resistance already being fostered by the Communists.

1977 was a year of dramatic change in the position of Egypt with President Sadat's peace moves, the expulsion of Russians from the country and the noticeable growing warmth in American-Egyptian relations. Israel responded reluctantly to begin with but finally signed a peace treaty with Egypt in April 1979 after the Camp David talks. The Jews are also involved in supporting the much criticised Ethiopian Derg, or military government, together with Russia and Cuba. It remains to be seen whether they will have the stomach to participate in the bloodbath which will certainly take place in Eritrea if the Derg succeeds in breaking the secessionist movement there.

1517-1947

Just as the Low Countries have earned the title of 'The Cockpit of Europe', Palestine surely deserves to be called 'The Cockpit of the Faithful'. Since biblical times the territory presently (1978) held by the Israelis, containing as it does the holy places revered by three religions, has been irrigated with the blood of Christian, Jew and Moslem. Here lie the seeds of perennial conflict.

Palestine was under Turkish rule from 1517 until the latter stages of World War 1 when, on December 9 1917, Jerusalem surrendered to the British General Allenby.

The Jews had been expelled from Palestine by the Roman Emperor Titus in 70 AD and scattered to various parts of the Empire under the Diaspora policy. The present uneasy situation in the Middle East is the latest phase in the Jewish people's struggle to return to the land that they made their own, by the right of the sword, in the time of Moses.

In 1897 a Viennese Jew, Theodor Herzl, founded the Zionist Organisation — rapidly to attract a world-wide membership — whose aim was the re-establishment of a Jewish nation in Palestine to provide a refuge for all those persecuted by their erstwhile hosts. Britain, who then maintained a protectorate in Egypt, offered the Zionists a few acres of barren desert in the Sinai peninsula but, predictably, this 'generous' offer was rejected. Lacking better opportunities, the Zionists began to establish isolated Jewish settlements, under Turkish rule, in Palestine.

During World War 1 Britain, desperate for support, waxed sympathetic to the idea of an eventual homeland for the world's Jews in return for money and men to help in her immediate crisis. She also canvassed Arab support and this from a source

already seriously worried at the ever-increasing influx of Jews into Palestine — then still a Moslem area. Short-term expediency led Britain to make ambiguous and conflicting promises to both Jewish and Arab communities in the Middle East and the outcome was good (for Britain) in the short term, but disastrous (for Britain, the Middle East and indeed the whole world) in the long term. Consider the effects of the Arab oil price rises following the Yom Kippur War of 1973, the repercussions of which touch each of us today.

Britain's frantic scrabbling for support in her war efforts led to the Balfour Declaration of November 1917 in which she promised, in return for financial help, to sponsor a 'national home' for the Jews in Palestine with the proviso that nothing must infringe on the existing rights of any of the inhabitants.

Having promised the Jews the fulfilment of their national aspirations, Britain now got together with France, the other major colonial power in Africa and Arabia and her ally in the world war, and promised similar benefits to all those Arabs of the Middle East, then living under Turkish rule, who would support them in their war against the Central Powers. In subsequent negotiations with Arab leaders, the two allies created the impression that Palestine (already half-promised to the Jews as *their* homeland) would be included as part of the new complex of Arab states which they guaranteed to set up. The Arab response to this initiative was the over-publicised revolt involving the controversial Lawrence of Arabia.

The immediate allied aim — the defeat of Germany, Austria and Turkey — was duly achieved and, in the short term, the Balfour Declaration and the subsequent Anglo-French dealings with the Arabs must be deemed a success. In the long term, however, the results of those politically expedient innuendoes, half-truths and deliberately obtuse statements have been disastrous. They have also been directly responsible for the loss of British lives during the last months of that country's involvement in Palestine and for all subsequent Arab-Israeli conflicts.

Following World War 1, the League of Nations gave Britain mandatory rule over the area and the Balfour Declaration was incorporated in the mandate document. The Zionist Organisation in Palestine was recognised as the agency representing Jewish views in the country. The subsequent dismembering of the Ottoman Empire, in which Britain played an active part, raised considerable protest from the world Moslem community and earned Britain more enemies among the Arabs as this act seemed in contradiction to guarantees given to them by Lloyd George that their holy places should be preserved for the Caliph of Islam.

Jewish immigration to the promised homeland now began in earnest and, from 60,000 in 1920, the Jewish population of Palestine rose to 108,000 by 1925. A Jewish National Fund was established which enjoyed global support; with its money land was bought, settled and cultivated and communities set up. Arab unrest at these developments rose and in 1929 the first serious inter-community violence broke out in Jerusalem.

Hitler's rise to power in 1933 spurred Jewish immigration greatly and the Arabs soon began to fear that they would be the minority in their native land. Both the cultures involved in this struggle had retained the traditional governmental system whereby the established church is also the main seat of political power. Thus the dangers of a 'holy' war, together with the irrational feelings that accompany such a conflict, were always present. In April 1935 the Moslem leader — the Mufti of Jerusalem — organised an anti-Jewish uprising which led to a much harsher British regime and the establishment of a network of fortified police posts at strategic points to check the movement of armed Arab bands which raided isolated Jewish settlements. The Jewish leaders adopted a non-retaliatory policy and, although they mobilised their Home Guard (the Haganah), it was instructed to act purely in defence. Jewish activists, however, founded the Irgun Zuai Leumi (IZL or Organisation of the National Army), an underground, extremist group which carried out retaliatory action against the Arabs.

Things quietened down by 1939 and the British Government launched a White Paper proposing restrictions on Jewish immigration to Palestine, thus assuaging Arab fears. The only tangible result of this was that the IZL added the British to its list of legitimate targets. During World War 2, however, the IZL suspended its attacks on the British and world Jewry threw its considerable weight into the international war effort against Hitler's Axis Powers. The Palestinian Arabs were less enthusiastic in their support for the Allied cause, probably because they had only recently been subjected to British military action during the suppression of their anti-Jewish riots, and also because the Mufti of Jerusalem had been exiled. Trans-Jordan, however, was wholeheartedly pro-British and the Arab Legion, which fought under British Army command during the war, was even called upon to operate against fellow Arabs in Baghdad and Syria. By 1944 the IZL was again active against the British in a now all-too-familiar campaign of bombings and murders.

In 1945, when the full horrors of the Nazi attempt to exterminate the Jews in Europe became known, there was greatly increased pressure from world Jewry on the British Government to raise quotas for Jewish immigration into Palestine and growing agita-

tion from the native Palestinian Arabs to reduce or even stop the rising flood of foreigners into their land. The British Government dithered and by 1946 the Jews in Palestine were almost in open revolt, with law and order crumbling rapidly and murder commonplace; anarchy was but a short step away. Recognising the impossibility of achieving a settlement, the British Government passed the buck to the United Nations (which had taken over the functions of the disbanded League of Nations) and on April 2 1947 requested the UN Secretary General to set up a special committee to study the Palestine problem with instructions to report by September 1 1947. In anticipation of being relieved of the mandate, the British began to withdraw, washing their hands of the blood that had flowed and was yet to flow.

The IZL was now joined by another extremist Jewish underground group, the notorious Stern Gang, the anti-British actions of which have troubled Anglo-Israeli relations even today with the controversy surrounding the first visit to Britain of Mr Begin, the Israeli Prime Minister.

On November 29 1947 the UN General Assembly passed a resolution recommending partition of Palestine (to be supervised by a Five Power Commission) with Jerusalem having international status. Neither Jew nor Arab was prepared to accept this for a moment and both sides began to get ready to fight. On May 14 1948 most of the British left Haifa and the only ones remaining were a small rear party in the docks. Although the mandate did not expire until midnight that day, the State of Israel's existence was proclaimed shortly after midday on May 14 and the new nation recognised by the USA within the hour. The stage was now set for the first in a series of bitter, semi-religious, quasi-civil wars which, if not soon ended, may yet prove to be the start of World War 3.

The 1948 Arab-Israeli war

Prior to the declaration of the existence of the State of Israel, both sides (Arab and Jew) had been sniping at each other in a grim and intensifying underground campaign, while frantically scrabbling together the tools which would enable them to escalate their struggles to full war status as soon as feasible. Much war material was gleaned by both sides from the depots left behind by the British Army and generally it was the Jews (with the better intelligence network) who got the best of these pickings.

The start of this increase in hostilities was the British withdrawal. This served as a signal for an invasion by the regular forces of the neighbouring Arab states in support of their Palestinian brethren — a process less awe-inspiring than it sounds!

UN efforts produced a truce which lasted from June 11 to July 9 and which was used by both sides to refit and replenish their disorganised forces. This was followed by the Israeli Ten Days' Offensive until July 18 after which a second truce lasted until October 1948, and then the fighting continued until the signing of the armistice agreements.

At the end of 1947 there were about 600,000 Jews in Palestine, half of them concentrated in the cities of Tel Aviv, New Jerusalem and Haifa , the rest either in the smaller towns or agricultural settlements throughout the country.

The strategy adopted by the Palestinian Arabs in the 'civil war' phase of this campaign was to control the roads by occupying the adjacent high ground and thus isolate and starve out the outlying Jewish communities by disrupting their supply convoys. These were escorted by members of the Jewish Settlement and Supernumerary Police, most of whom were also members of the Palmach, the elite offensive unit of the Haganah.

The Arabs had certain advantages in that they could inflict damage on the enemy merely by making his existence difficult and they enjoyed relatively easy replenishment of warlike materials by virtue of large-scale smuggling from neighbouring states, all of whom were Arab sympathisers. The Jews on the other hand had to fight just to exist and all their arms and supplies had to be smuggled in from abroad.

The position was not all hopeless, however, for, although the Arab nations had banded together in the British-inspired Arab League, their unity of purpose was fragile in the extreme. Syria became the reception and training area for the thousands of Arab volunteers who answered the call to fight the Israelis and many Syrian regular Army officers resigned and joined this 'Arab Liberation Army' (ALA) which was commanded by Fawzi Kaukji — a Lebanese with a colourful military career whose one constant ingredient had been a strong anti-British involvement.

By March 1948 about 5,000 men of the ALA had infiltrated into Palestine and formed seven units divided into four 'commands': Northern (commanded by Kaukji and with headquarters at Tubas), Eastern (centred on Jerusalem and commanded by Abdul Kader), Western (in Jaffa and Ramallah) and Southern (in the Julis area and commanded by the Sudanese Tarik Bey). The ALA had, in fact, already been in action in a raid from Syria on February 15 1948 on the Jewish settlement of Tirat Zvi about five miles south of Beisan; in spite of considerable numerical superiority, the attackers were beaten off.

On April 4 1948 Kaukji's ALA with 1,000 men and a battery of 75 mm mountain howitzers attacked the

Jewish settlement of Mishmar Haemek in the valley of Esdraelon but without success. On July 10 the attackers gave up and pulled back only to be pursued hotly by the Haganah as far as Megiddo. The Jews then consolidated their hold on the territory they had won and the reputation of Kaukji and the ALA suffered a considerable setback.

Another change in the situation was that the Arab grip on the all-important roads now began to be weakened as the Jews captured and garrisoned more and more of the adjacent high ground. An example of this was the Jewish ten-day Operation Jephtha, launched on April 18 and aimed at securing the Tiberias - Rosh Pina road and the town of Safad which had a population of 2,200 Jews and over 10,000 Arabs including a mixed garrison of about 2,000 ALA and Arab Home Guard. On May 1 the Jews assaulted Safad — the Arab civilians fled and the ALA held firm; house-to-house fighting continued until May 11 when Safad finally fell into Jewish hands.

Operation Nachschon took place between April 2 and April 20 with the aim of opening up the road from Tel Aviv to the isolated Jewish communities in New Jerusalem (100,000 souls) and in the Jewish quarter of Old Jerusalem (1,700 souls). Jewish forces for Jerusalem during Nachschon were commanded by Colonel Shaltiel of the Haganah (commander in the Jerusalem District since February 1948) and included 1,000 Haganah soldiers, three platoons of IZL and a company-sized force of the Stern Gang. These two latter organisations obeyed Haganah commands only if it suited them. The Arab commander in Jerusalem was Abdul Kader Husseini but the exact strength and composition of his forces is unclear.

Arab forces were deployed along the heights commanding the vital Tel-Aviv - Jerusalem road and they were content to remain static, ambushing Jewish convoys as they arrived. To break this Arab stranglehold, the Jews gathered two Palmach units and two field army battalions (1,500 men in all) at the western end of the road and simultaneous Jewish assaults at both extremities of the route began on April 3.

By April 6 Hulda and Deir Muheisin in the west were captured but the victors were then ordered out by British troops who wanted the road under their own control. Kastel meanwhile changed hands repeatedly, falling to the Jews finally on April 9 when Abdel Kader was killed and his men lost heart and withdrew. On April 11 Colonia, Bab el Wad and Beit Mahsir fell to the Jews as did Saris on April 16. Suba, however, continued to hold out and on April 17 abortive Arab counter-attacks were launched on Bab el Wad. On April 9, during the Haganah's struggle for Kastel, the IZL and Stern Gang assaulted and captured Deir Yassin with Haganah assistance. The Haganah then withdraw to redeploy and the two 'private armies' massacred 254 Arab men, women and children of the village and announced their feat to the world as the beginning of the Jewish conquest of Palestine and Trans-Jordon. The Jewish Agency strongly denied knowledge of, or implication in, this outrage and sent a message of condolence to King Abdullah of Trans-Jordan.

Another route-clearing operation took place between Tel Aviv and Haifa on May 12 and by May 16 the road was under Jewish control. The key port of Haifa was a prize both sides coveted and they had started increasing their forces there early on in the crisis. On April 21 General Stockwell (the local British commander) withdrew his remaining men into the port area and so informed both protagonists. Hostilities commenced at once and went on through the night with the Jews pushing into the city from Mount Carmel in four columns. At about midday on April 22 the local Arab commander, Amin Aziddin (reputedly an ex-officer of the Arab Legion), slipped away from the city with his staff, for reasons not yet fully explained, and Arab resistance began to decline. General Stockwell now intervened and arranged a cease-fire so that a truce might be agreed; by now the Jews held the upper hand and the Arabs, rather than submit to being disarmed (and possibly massacred), chose to evacuate all their men, women and children from the city within five days. Haifa thus became a Jewish city and its Arab population joined the growing ranks of the Palestinian refugees who, with their children and now their grandchildren, are still with us today.

The Israelis may have been pleasantly surprised at being presented with a city without its potentially dangerous inhabitants. They soon realised the long term advantages to be gained by evicting the Arabs living in the areas they controlled and quickly made it policy to urge the inhabitants on their way by both physical and psychological means. Where Arabs remained in their homes following a Jewish take-over they were evicted; if the Jewish presence was only temporary then the dwellings were destroyed as they withdrew. By far the most effective inducement to Arab vacation of the new Israel, however, was the memory of the massacre at Deir Yassin.

Jerusalem City

After Abdel Kader's death, Arab command in the Jerusalem area fell to Emile Ghoury, a Christian Arab, who blockaded the Jews in the Old City. Their situation deteriorated and the Haganah assaulted the Arab forces in order to break through to them. On April 30 the Jews gained a foothold on Katamon, an Iraqi-held ridge in the south of the New City. An Arab counter-attack was itself taken in flank and the

Israelis secured their position by May 2 when a cease-fire (negotiated by the UN High Commissioner) came into force.

The coast

Tel Aviv was Jewish, Jaffa Arab and on April 25 the Tel Aviv section of the IZL (600 men) attacked Jaffa on their own initiative although the assault soon ground to a halt. Haganah aid came up and on April 29 a new assault was launched. By May 13 the Arabs had fled and Jaffa was Jewish. Lydda airport was evacuated by the British on April 25, occupied by the Jews; reoccupied by the British on April 27 and later seized by Iraqis.

Tel Aviv-Jerusalem road clearance

The Jewish Operation Maccabi began on May 8 and on May 11 Beit Mahsir was recaptured (for the last time) by the Jews. The road was now open.

The Arab invasion of Palestine took place on May 15 1948 when General John Glubb's Arab Legion crossed the Allenby Bridge over the River Jordan from Jordan and occupied Ramallah, Latrun and Bethlehem while sending detachments to the outskirts of Jerusalem itself. They also took possession of sections of the road from that city to Tel Aviv. Simultaneously, two Egyptian Army columns started from El Arish and pierced upwards into the Jewish abdomen, one aimed for Tel Aviv, the other for Jerusalem to link up with the Jordanians.

The initial scrambling for position within the disputed area was now over and the Arab states decided, logically, that their success would be best served if they launched their hastily-prepared Armies on a combined, unified and carefully co-ordinated, concentric assault from their peripheral positions towards the common target. Unfortunately for them, they could not agree on the details of a unified command and King Abdullah of Trans-Jordan assumed the position of supreme Arab military commander. Amid public acquiescence from his allies he disposed of his forces but in private his every move was jealously watched, particularly by Syria and Egypt and, in fact, each of his co-belligerent states ordered its Army to serve its own national interests.

The first truce, 0800 hours June 11 (local time) - July 9

On May 14 1948 Ben Gurion had proclaimed the formation of Medinath Yisrael — a Jewish state to be called Israel — in Tel Aviv. America granted de facto recognition within minutes of the announcement and Russia did so three days later. The United Nations appointed the Swedish Count Bernadotte to be their mediator in Israel on May 20 and the Jews took exception to him at once, partly because he was suspected of having been a Nazi sympathiser during World War 2 and partly because he was thought to be pro-British as well — an interesting if unlikely combination! A British resolution proposing a four-week truce in Palestine was carried on May 29 1948 and it came into force at 0800 hours local time on June 11. The main conditions of the truce were that the combatants were not to increase their fighting troops or move warlike material into the disputed areas.

Within Israel the declaration of a state of emergency on May 20 was quickly followed by a defence ordinance and the control of manpower law. The former introduced conscription, instituted the National Army (land, sea and air forces) as the only lawful armed body in Israel and forbade the existence of other armed groups. The National Army was to swear allegiance to the state. This effectively put an end to the independent lives previously led by the IZL and the Stern Gang.

The control of manpower ordinance authorised mobilisation of all adults between 17 and 55 years of age. Those not serving in the National Army were liable for compulsory agricultural service and a two-months annual military training period for all over 17 years of age was introduced.

The IZL reacted strongly to this unwelcome bridling and were roughly brought to heel by the Haganah at Tel Aviv on June 22 1948 when a ship (the *Altelena*) containing quantities of arms and ammunition destined for IZL groups was sunk by Haganah mortar fire and hundreds of IZL men temporarily arrested.

During June the Israeli Army was reorganised for operational purposes into four 'Fronts' each equating to a corps in European parlance. *First Front:* In the north including Galilee and the northern side of the Samarian Triangle. *Second Front:* The western side of the Samarian Triangle and from Petah Tikva to Zochron Yaacou. *Third Front:* The centre of Israel from Tel Aviv to Jerusalem. *Fourth Front:* The south of the country, extending from the Mediterranean to the Gulf of Akaba and north to Nes Ziona.

The Front Commander had control of all troops within his area. Czechoslovakia, now under Communist control, willingly sold arms and ammunition to Israel while Britain and the USA provided Beaufighters, Flying Fortresses and a steady supply of experienced pilots, although the planes were smuggled and the pilots ex-servicemen volunteers. A brief political clash took place between Ben Gurion (Prime Minister and Defence Minister) and his Deputy Defence Minister Israel Galili. Ben Gurion wanted to institute a conventional rank structure with its attendant regalia into the National Army; Galili was in favour of the 'unwashed Heroic' chaos associated with revolutionary armed groups and 'people's armies'. Ben Gurion won the day and Galili resigned.

This truce gave the Jews valuable breathing space in which to consolidate their positions, absorb new weapons, recruits and equipment and to reorganise their forces. On the Arab side, only the Trans-Jordanian Arab Legion had acquitted itself well but it too needed rest for maintenance and refitting. The performance of the other Arab regular Armies had not come up to expectations and they were in a confused and demoralised state. All contestants were short of ammunition.

The fighting so far had demonstrated clearly to all leaders of the Arab states opposing Israel the many disadvantages of their position — those of divided forces operating independently and in an uncoordinated manner on exterior lines against a capable enemy. Even so, they were, and still are — unable to overcome their mutual suspicion and hostility and to weld their fragmented forces into one Army or, at least, into individual Armies operating effectively in concert.

An additional blow to the most efficient Arab fighting force — the Arab Legion — was that the British Government, bowing to pressure from her American allies, withdrew from it all British officers seconded to serve in various positions of command.

Both sides in the Palestine conflict blatantly abused the terms of the first truce in that they reinforced their men and material as fast as they could to be ready for the next round of fighting. The Egyptians increased their force to 18,000 men and brought up more artillery, ammunition and planes. The Iraqi contingent rose to 15,000 men but of these, four battalions were local Palestinian irregulars. The ALA had by now shrunk to about 2,000 men in all. The Arab Legion's presence in Palestine actually dropped numerically during the truce from 5,000 to 4,000 as they had to detach men in response to an internal threat to the security of Trans-Jordan.

It may be said that Israel benefited most from the first truce and came out of it much better organised, armed and equipped than before. If anything, the Arab situation had deteriorated slightly due to their continued political bickering. The truce ended on July 9.

The Ten Days' Offensive, July 9-18

The seat of the fighting during this time was in the centre and north of the country. In the centre the Egyptians mounted attacks from their positions on the Isdud - Jerusalem road but they made no gains and subsequent Israeli counter-attacks wrested some villages from their control.

The Haganah, now with a central planning staff functioning well, launched four operations against their separate enemies with the following aims:

1 To reinforce their grip on Tel Aviv and to secure control of the road from there to Jerusalem.

2 To capture Mishmar Hayarden from the Syrians (a prestige target).

3 To destroy the ALA in the Nazareth area.

4 To capture the Old City of Jerusalem.

The Tel Aviv - Jerusalem sector

The Jewish forces were Colonel Alon's Palmach brigade (6,000 men) which was divided for this operation into three battle groups, each of about battalion size and equipped with Jeeps, half-tracks, armoured cars and artillery. The Jeeps were used as 'taxis' to give the infantry greater mobility. Air support was also available. Their opponents were the Arab Legion (4,000 men) stretched from Jerusalem to Latrun and Beit Nabala, and ALA units in Lydda and Ramleh.

During the night of July 9 two Palmach battle groups set out (one from Tel Aviv and one from Gezer) on a pincer movement aimed at taking Lydda and Ramleh. On July 10 the villages of Yahudiah and Wilhelmina were captured and next day Tira, Deir Tarif and Rantis also fell, Beit Nabala, with its Arab Legion garrison proved too tough a nut and was by-passed by the Jews who went on to capture Hadita. The southern Palmach battle group from Gezer took the Arab villages of Innaba and Jimza in the morning of July 10 and went on to relieve the Jewish settlement at Ben Sheman. They joined up with the northern battle group at Hadita that night.

On July 11 the combined battle groups assaulted Lydda but the Arabs held firm. A relief attempt by some Arab Legion armoured cars caused temporary confusion but was eventually repulsed. Lydda surrendered on July 12 and Ramleh, now abandoned by its defenders, was also occupied. The remaining Arab populace (about 60,000) was immediately ejected and driven off with mortar fire towards Ramallah. This policy was applied to all captured localities.

Glubb Pasha, realising that his men were overstretched, evacuated the garrison of Beit Nabala and the Israelis took the place over on July 13. Latrun police post with its Arab Legion garrison was next to receive attention of the Palmach who assaulted it, suported by five tanks on July 14. In a dramatic duel a single artillery piece on the roof of the police post engaged and eventually disabled all of these tanks even though the crew of the gun had frequently to be replaced as they were killed or wounded. Latrun held out until the second truce was declared on July 18. Jewish respect for the fighting qualities of the Arab Legion soldier was justifiably high.

This third Palmach battle group was also employed against Egyptian forces moving north from Bethlehem on Latrun. On July 13 Sara was captured; Suba next day; Deir Umr on the 16th and Deir Rafat and Iswa on the 18th. The captured Jewish settlement of

Tartuv was also retaken. The Egyptians were pushed back south over the Ramleh-Jerusalem railway and the Arab inhabitants as far south as Beit Jibrin were all evicted by the Israelis.

A hallmark of the Jewish tactics during this operation was the wide use of the night attack — an operation far more difficult to execute successfully than an assault by day and one which can easily degenerate into a shambles unless carefully controlled.

The Syrian Front — Operation Barosh, July 9-18 1948

This operation was a disappointment to the Jews and conversely a credit to their Syrian foes. Mishmar Hayarden, a Jewish settlement on the west bank of the Jordan river, just south of Lake Huleh, had been taken by the Syrians in May during their initial invasion. Its recapture — a point of honour to the Israelis — was designed to be accomplished by Operation Barosh for which they deployed 2,000 men with half-tracks, armoured cars and artillery. The over-complicated Jewish plan divided the available forces into four groups and committed them all, thus leaving no reserve and scattering their efforts instead of concentrating them.

The first column was to cross Lake Huleh from Hulata to the Jewish-held village of Dardara and then stab south-east to cut the road from Mishmar Hayarden to the Syrian rear. The second column, starting also from Hulata, was to bridge the Jordan south of the lake and also cut the road to the Syrian rear but a little to the west of the first column. The third and fourth columns were to attack the Mishmar Hayarden bridgehead to prevent its defenders interfering with the first two columns. The operation started at nightfall on July 9 and made good progress initially but the first column, having captured the village of Dabura, instead of pushing on to the road just stayed put. The second column found that it had insufficient bridging stores to cross the Jordan with and was delayed so that by dawn only a few troops were over the river. The third and fourth columns attacked the bridgehead, were repulsed and went to ground in front of the defenders.

On July 10 the Syrians, with two brigades, mounted well-prepared and co-ordinated counter-attacks from Mishmar Hayarden and threw back the Israelis there. At the Jordan crossing another counter-attack caused the Israelis to withdraw over the river. They held Dabura, however, until the fighting was stopped by the second truce on July 18.

The Galilee fighting — Operation Dekel

Kaukji's ALA was now about 2,000 strong in this area and under Lebanese control; his forces included some armoured vehicles and artillery and his headquarters was at Nazareth. The Israelis decided to secure their grip on the Haifa-Acre area and to take the Nazareth position as a second step.

The Jewish commander was Colonel Carmel (who had captured Haifa) and his forces were the Anglo-Saxon Brigade (from Latrun) of two battalions and supporting forces with Jeeps, half-tracks, armoured cars, anti-tank guns and mortars. The first move was made on July 9 with a thrust north-east from Acre towards the Israeli-held village of Yehiam. All went well and the intervening Arab villages were captured and their inhabitants evicted. A secondary probe eastwards along the Birwa-Rama road, however, was stopped just north-east of Birwa.

Carmel now transferred his force southwards and pushed out south-east along the road to Nazareth. Against stiff resistance the Israelis pushed ahead from July 13 to the 16th when they captured Nazareth. Kaukji escaped north with his staff. On July 17 and 18 the victorious Jews moved north-east from Nazareth to relieve their settlement at Shajara and to take all the Arab villages surrounding it. This was completed before the second truce came into force. The Jerusalem area was quiet during this phase of the fighting.

The second truce, 1730 hours July 18 - October 15

This was imposed by world pressure and was largely a repeat of the first truce in that its only noticeable effect was to reduce the level of fighting to very low-key squabbles. There was no definite duration set initially and in fact it lasted (more or less) until October 15 1948.

Count Bernadotte strove in vain to get the antagonists to agree to a partition plan for Palestine. The Jews rejected it because they now felt strong enough to be sure of taking it all by force and the Arabs because the major part of their spoils would go to King Abdullah of Jordan and his allies could not stomach that for an instant.

On September 17 Count Bernadotte was murdered by the Stern Gang in Jerusalem. Despite worldwide outcry, Israeli action to bring the criminals to trial was only a show and no charges were ever brought. The American negro Dr Ralph Bunche took Count Bernadotte's place.

The Israeli position strengthened daily as men and material poured into the country from all over the world. Among the Arabs there was no similar improvement in hardware and on the political side they began to drift even further apart as King Abdullah of Jordan began publicly to compare the performance of other Arab troops with that of his own Arab Legion, British-trained and subsidised as it was.

A new problem for the Arab states was that of the refugees expelled by the Jews in their advances. By October 1948 there were estimated to be over 450,000 of them in Lebanon, Syria, Trans-Jordan and in Arab-held Palestine. The fragile economies of these Middle Eastern states were stretched enough without having to cope with further problems of this magnitude. The Jews, on the other hand, were ruthlessly creating a homogenous population with no terrorist potential for the future at the cost of their Arab neighbours. This problem, so easily and rapidly formed, is still with us 30 years later and takes a regular toll in blood. One is forced to wonder if the Jews would have taken the same course of action had they known the bitter years and wars which eviction of the Arabs — so simple in the short term — would cost them in the future.

The October fighting, October 15-21

This phase of the conflict took place mainly in two areas; firstly in the south against the Egyptians and then in the north against the remnants of the ALA. The Egyptian Army (headquarters at Gaza) held a hollow ring of land in the Negev with the Gaza strip as the western side, the Majdal-Beit Jibrin road as the northern arm and the Hebron-Asluj area in the east. To the south was Egypt itself and in the middle of this ring were numerous Israeli settlements (which were being ignored by the Egyptians in the hope that they would be starved out) and a highly mobile Israeli Army force.

The Egyptian forces in the periphery of the ring were dedicated to the static defence of their locations and along the Majdal-Beit Jibrin road the total depth of their positions was only a mile or two in some places and nowhere more than five. Available Egyptian forces numbered about 15,000 men with artillery, a battalion of tanks and some air support. The ring around the Israeli Negev settlements was not impenetrable and regular nightly replenishment between Egyptian positions was achieved. Air dropping of vital commodities was also practised.

During the truce, the Jews arranged to use the roads which ran through the Egyptian lines but as the Egyptians also needed these roads for their logistic use, the United Nations observers had their work cut out regulating the flow of traffic, particularly over the cross-roads west of Faluja.

Anxious to optimise their military supremacy, the Israelis planned Operation Ten Plagues to break the Egyptian hold on the Negev and concentrated 15,000 men (including the Palmach division) under Colonel Alon to carry it out. The plan was for a series of initial feint attacks followed by the main thrust breaking the Egyptian position on the Majdal-Beit Jibrin road. Early seizure of air supremacy was a vital part of the plan.

On September 29 the Jews took some tactically important heights east of Faluja and held them against subsequent counter-attacks; the Negev mobile column was reinforced and resupplied. Finally, when their preparations were complete the Israelis sent a provocative supply convoy for the Negev through the Egyptian road blocks — it was fired upon and withdrew with loss. In the evening of October 15 the Israeli Air Force struck at Egyptian airfields in the Negev and secured the necessary temporary control of the air. That night the Jews thrust south past Beit Jibrin and cut the east-west road; simultaneously several diversionary attacks were mounted from the Negev at various points along the Egyptian periphery. At Beit Hannun in the west, the Jews brought the coast road under fire thus cutting the Egyptian supply lines. Other raids were made at Khan Yunis, Rafah and El Arish. The main attack went in at dawn on October 16 near Iraq El Manshiya but the Egyptians beat this off, causing some tank losses to the Israelis. They regrouped and tried again, this time at Iraq Suweidan in the evening of October 16; one of two important hills was taken but the defenders held fast on the other. During the 17th the Egyptians counter-attacked but the position had stabilised: they were unable to use the east-west road but the Israelis had not broken through to their Negev force.

During October 18 and 19 Colonel Alon probed the defences of Huleiqat and then mounted a successful night attack against the place on October 19-20; by dawn on the 20th they had broken the Egyptian ring and Jewish surface communications with the Negev were open.

The turning of the Egyptian line from Huleiqat east was the next logical step and Alon tried this but the defenders held firm in an area lining the road five miles long by about a mile deep which became known as the Faluja Pocket. Transferring forces south-eastwards, Alon assaulted Beersheba in the night of October 20-21 and captured it, cutting off those Egyptian units in the Hebron area. To stave off complete collapse here, Glubb Pasha rushed a column of the Arab Legion to Hebron and held together what was left.

The next Egyptian post to fall was Beit Hannun on the coast and now both Egyptian road and rail communications northwards were cut, although some traffic still flowed along the beach. Offshore the rival infant Navies bickered for commmand of the shallows in support of their Armies.

The Egyptians now realised that their forces in the northern coastal area were cut off; lacking the means or will to break through to them they withdrew them

south from October 27 to November 5, leaving the Faluja Pocket holding out gallantly alone. At this point the tempo of the combat was reduced and Dr Bunche of the UN tried to enforce another cease-fire or truce; the Jews announced some 'paper' withdrawals but in reality maintained a firm grip on all that they had taken. The Faluja Pocket held out under constant attack; Iraq Suweidan fell on November 8 but the remaining defenders held fast; no attempts were launched to fight through to them from the south or the east and indeed Egypt was left to fight alone in this phase of the war, with the exception of Glubb Pasha's support at Hebron.

The Galilee fighting — Operation Hiram, October 28-31

Kaukji and the rump of the ALA (2,000 men) were now reorganised in the mountains south of Lebanon into three 'Yarmuk' Brigades. (The Battle of Yarmuk River was the name of the victory of the Arab Army over the Byzantines on August 20 636 AD which gave the Arabs control of Palestine). The Israelis decided to destroy this nuisance before it redeveloped into a serious threat (Kaukji had raided Manara and cut the road from there south to Malikiya). Colonel Carmel was given command of Operation Hiram to do this job. His brigade was reinforced with armoured vehicles and the entire Israeli Air Force was placed in his support. Hiram was to be in two phases. Phase 1 consisted of diversionary attacks in the south of the ALA area while the main assaults went in against Tarshia in the west and Sasa in the east. The two columns were to join up at Sasa. In Phase 2 the combined Israeli columns would destroy local ALA resistance and then move north-east up the Huleh valley to Malikiya and Manara.

Operation Hiram began at dusk on October 28 after preparatory bombing raids but Kaukji, suspecting the real Israeli intention, withdrew his southern brigade north of the Acre-Safad road as soon as the diversionary attacks began and thus concentrated his forces to oppose the real Israeli thrusts. The first such assault (on Tarshia from Kabiri) was made on October 28 and was repulsed; next day Tarshia was bombed heavily. The main assault was made from Safad at dusk on October 28 against Meirun and that place was taken at 0800 hours on October 29; they pushed on to Safsaf by midday and to Sasa (a vital road junction) by evening. By midnight Sasa was also in Jewish hands and Kaukji was running north to the Lebanon. Tarshia meanwhile, had been heavily bombarded by air and surrendered on October 30, having been abandoned by the ALA. The Jewish assault force pushed on and joined up with the main force at Sasa that day.

Arab resistance south of the Acre-Safad road melted away. Colonel Carmel now cleared the border road to Tarbikha in the west and then moved northwest through Malikiya (where another Jewish column from the Upper Jordan Valley joined him) and Manara on into Lebanon. Their advance stopped at about 0600 hours on October 31 by which time they had occupied a strip of Lebanese territory about five miles deep and 15 miles long. The only disappointment of this operation was that, although much ground had been occupied, very few casualties had been inflicted upon the elusive enemy. The initiative had now been seized by the Jews on all fronts and they were dictating the fighting, its pace and location.

The end of the fighting

The Israelis now turned their attentions southwards again to the Egyptian Army in the Negev. They reestablished ground contact with their garrison at Sodom which had been isolated (but unmolested) throughout. A cease-fire was negotiated with the Jordanians in Jerusalem and on December 1 King Abdullah of Trans-Jordan was proclaimed King of Arab Palestine in Jericho by a gathering of carefully selected Arab dignitaries. The new state (consisting of Trans-Jordan and Arab Palestine) was to be known as the Hashemite Kingdom of Jordan.

All other Arab states howled in dismay, particularly Egypt which had sponsored the Palestine Arab Government at Gaza. The Arab League was also opposed to this move as it constituted a partition of Palestine.

Meanwhile the Egyptians were planning to break through to the Faluja Pocket; on November 19 they drove eastwards from the Gaza-Khan Yunis area into the Negev and had occupied two hills (Tel Jamma and Tel Fara) by the 21st. From here, on December 7, they launched a combined infantry-armoured assault with 16 tanks against Israeli positions but were repulsed losing five tanks. On December 10 another Egyptian probe was made east from Rafah against Nirim but Israeli counter-attacks pushed it back and also recovered most of the ground lost in the northern thrust area.

Not content with this, the Jews now launched Operation Ayin designed to break the Egyptian offensive potential completely. The forces involved were 15,000 men under Colonel Alon, approximately the same men as he had for Ten Plagues and including the Palmach.

The Egyptians were still concentrated very much on the motor roads in the Negev, ignoring the possibility of movement cross-country. Using his internal lines, Colonel Alon planned to mount a diversion in the west, then to strike at the Egyptians in the east at Asluj and, finally, to swing his centre of gravity across country to hit the enemy in the Gaza strip area and at El Arish. Operation Ayin began on December 22 and

was heralded by air raids backed up by artillery fire on the Rafah, Khan Yunis and Gaza areas.

A ground assault against the Gaza strip followed and the Egyptians countered this by committing their reserve to push the Jews back east again. Egyptian pleas to her allies to mount diversionary attacks at other points in Israel fell on deaf ears. With Egyptian attention focused now in the west, the Israelis, using a disused Roman road from Beersheba to El Auja, by-passed the enemy positions along the existing road which went between those two places via Asluj and struck at El Auja and Asluj. One column cut the Rafah-El Auja road, the other hooked around to the east of El Auja and attacked it from the south. A third (and smaller) column, started from Beersheba, moved across the desert and by-passed Asluj to join up with the second column assaulting El Auja. By the night of December 24-25 El Auja was almost surrounded but the garrison held out for two more days before slipping off south-west into the desert on December 27. Meanwhile a fourth Israeli column assaulted and took Asluj on December 27.

Alon now split his forces and moved them from east to west along the El Auja-Rafah road and into Egypt itself via Abu Aweigila (an Egyptian logistic depot) on to El Arish. At Abu Aweigila the highly mobile Jewish column surprised and scattered an Egyptian brigade in the night of December 28-29 and raced on north-west towards El Arish, capturing several Egyptian planes on the ground at the airfield of Bir Lahma. But the prize of El Arish was not to fall to the Jews in this war; intense international political pressure was now brought, by Britain among others, to get the Israelis to evacuate Egyptian territory (this they did from January 2-7 1949) and so Colonel Alon turned his men northwards on Rafah.

Egyptian public opinion, confidently expecting a walk-over against the Jews in this war, now turned ugly at learning of nothing but defeats and, on December 28, the Egyptian Prime Minister was assassinated. Even so, national pride forbade that foreign help should be asked and the new Prime Minister stated publicly on January 3 1949 that Britain would not be asked to intervene. With the military situation in the Negev hopeless, the only course open to the Egyptians was to ask for an armistice which they did on January 7 1949; this was granted by the Jews just before they were ready to assault Rafah.

There followed the recognition of Israel by Britain on January 29, by France on the 31st and then by most other countries. The Arabs, with the recent exception of Egypt, have still refused to recognise the existence of the state.

In the period January-March 1949 the Israelis occupied the Negev down to the Gulf of Akaba and the port of Eilat. This town was very close to the Jordanian port of Akaba and, as the latter had a garrison of British soldiers, there was concern that an incident might flare up, but nothing happened.

Armistices were now signed between Israel and her enemies at the following dates: Egypt — February 24 1949 (whereby the Faluja Pocket garrison marched out with full honours of war; Egypt retained the Gaza strip and prisoners were exchanged); Lebanon — March 23 1949 (whereby Jordan took over the Samarian triangle from the Iraqis, Israel took over the Lydda-Haifa railway and the Aflua-Hadera road and a demilitarised border was established from Akaba, through the Dead Sea up to Beisan (excepting the Jerusalem area where the status quo was agreed upon); Syria — July 20 1949. This was late due to Syrian refusal to evacuate certain Israeli territory they held and due to internal Syrian politics where a coup d'état by Colonel Husni Zaim (commander of the Syrian armoured brigade at Mishmar Hayarden) paralysed proceedings. The Iraqis refused to negotiate with Israel at all.

The 1956 Arab-Israeli war

Lack of space forbids that we consider in detail the Anglo-French invasion of Egypt 'in defence of the Suez Canal' and the frantic international political activity, largely American inspired, which led to the collapse of that final show of colonialist, gunboat diplomacy. It is as well to remember that Western disarray gave the Russians a perfect excuse to stifle the Hungarian revolt without fear of anything more than verbal interference. In Israeli terms, Operation Kadesh (their reprisal attack on Egypt for a prolonged campaign of fedayeen attacks) 'partly coincided with the Anglo-French Suez campaign' and this is probably as close to the truth as we are likely to get for some years.

The charge of collusion between the French, British and Israeli Governments in their assaults on Egypt has repeatedly been levelled, always denied and we shall doubtless have to wait until the statutory 30 years has passed before the Public Records Office, or Parliament, open their files and reveal what they consider happened.

After the end of the 1948 War of Independence, armistice agreements had been concluded between Israel and her Arab neighbours but they had all refused the new Jewish state political recognition (and this is still the position today) and no peace treaties had been signed.

The Arab states, burdened with the Palestinian

refugees, responded to their military impotence in two ways. Firstly, instead of finding these refugees new homes, dispersed among their own populations, they kept them herded together in camps in the Gaza strip, in Lebanon and in Jordan as political pawns to be used in the game of international diplomacy. Secondly, they encouraged recruitment and training of anti-Jewish terrorists from among the fertile ranks of the refugees, equipped them and sent them back into their old homeland to carry out acts of sabotage and terror against Israeli and foreign civilians in order to press the cause of a return of the Palestinians to their homelands and to sap the Israeli economy by diverting valuable resources to security.

The fedayeen campaign had been mounting in intensity during 1955 and Israeli reprisals had escalated in proportion. In October 1955 Czechoslovakia began supplying large quantities of Soviet arms to Egypt, changing the military hardware balance in the Middle East and causing the Israelis to consider preventive action before Egypt became strong enough to launch an invasion.

An important and obvious step towards another concerted Arab attack on Israel was taken on October 25 1956 when Egypt, Jordan and Syria set up a joint military command with the Egyptian chief of staff as its head. The next move was to put heavy guns at Ras Nusrani at the southern end of the Gulf of Akaba thus blocking Israeli access to the Red Sea from their port of Eilat.

Unfortunately the Arab political objectives and methods were not as well co-ordinated as their military preparations for the intended assault on Israel. On July 26 1956 President Nasser nationalised the Suez Canal and, quite rightly, ordered the Egyptian Army to prepare to fend off the expected Anglo-French attempt to re-establish their authority on the waterway. The Egyptian Army was thus given two directly conflicting tasks to carry out: firstly, to prepare for an offensive from Sinai eastwards into Israel and secondly, to deploy forces from Sinai back westwards into the Canal Zone.

At the same time, the deployment of the newly arriving Soviet arms and equipment caused the Egyptian Army more problems with training, familiarisation, maintenance, repairs and spares backing all to be co-ordinated with an expansion programme and the changeover from British to Soviet military doctrine.

If, on the Egyptian side, the political and military objectives were dangerously divergent, the reverse was true in Israel. Since 1948 the Israelis had concentrated on building a citizen Army, mainly based on conscripts, which could be quickly mobilised in an emergency. As the Army and the people of Israel were effectively united, there was also close identity between the military and political aims for the forthcoming pre-emptive strike against her still largely disunited and increasingly disorganised foes. The IDF was given the following tasks: firstly, to destroy the fedayeen bases in the Gaza Strip and along the Sinai border. Secondly, to weaken Egyptian offensive potential by destroying her logistic base and airfields in Sinai and, lastly, to open the Straits of Tiran to Israeli shipping.

The Egyptian forces were located mainly in the north (along the Gaza Strip and back to El Arish); in the east (at Abu Aweigila, Um Shaykhan and Quseima); in the south-east (Kuntilla, Ras al Naqb and Thamad) and in the south (el Tur, Ras Nusrani and Sharm el Sheikh). The Egyptian lines of communication westwards to the Suez Canal were guarded by garrisons at vital points (Bir Hassneh, Bir Gafgafa, Nakl and the Mitla Pass). As has been stated, many Egyptian units had been pulled back from the Israeli front to the Canal Zone where most of their air bases also were.

The aims of Operation Kadesh were to cripple the growing Egyptian military strength and it was decided to go all out to capture as much hardware (tanks, guns and equipment) as possible, thus inflicting more lasting damage.

The Israeli assault was mounted in three phases. Phase 1 was a deep left hook to grasp the strategic Mitla Pass (thus cutting one of the routes for resupply and withdrawal) while simultaneous attacks diverted Egyptian attention elsewhere. Phase 2 would bring about the destruction of the Egyptian front line formations. Phase 3 involved mopping up (including clearing the Gaza strip), hot pursuit of the broken Egyptian formations and seizure of the Straits of Tiran.

Phase 1

At about 1600 hours on October 29 an Israeli airborne battalion was dropped near Parker's Memorial, just east of the fortified Mitla pass positions. The rest of that airborne brigade moved by surface routes to reinforce their comrades, capturing Egyptian positions at Kuntilla and Thamad en route. Simultaneously the Israeli Air Force gained battlefield air superiority while an armoured-infantry task-force stormed the vital road junction of Quseima and secured another port of entry into Sinai. They then closed up to their next objective — the Abu Aweigila-Um Shaykhan complex.

At the end of Phase 1 the southern flank of the Egyptian line had been turned, one escape route blocked and the 3rd Egyptian Division in the Gaza Strip outflanked. Ras el-Naqb was captured on October 29.

Phase 2, October 30-November 1

The Israeli airborne brigade captured Nakl and joined up with their advanced battalion that night of October 30. On October 31 at 0430 hours British and French forces launched their joint assault on the Suez Canal Zone and bombed Egyptian airfields.

In the centre it was discovered that the Dayqa Pass was undefended and therefore the armoured brigade of the central Israeli division moved rapidly through it to outflank the Abu Aweigila position and attack both it and the Rawafa Dam location from the rear in a fierce armoured battle.

This done, the Egyptian brigade at Um Qataf and Um Shaykhan was cut off and Israeli forces were sent south-west to Nakl to reinforce the airborne brigade. Also on October 30 Awja Masri (on the Ismailiya-Nizzanah road) was taken as was Tarat Um Basis, seven kilometres from the border. Israeli frontal assaults on the Um Qataf-Um Shaykhan positions failed and the attacking forces were diverted to encircling movements to cut the road from Um Qataf to Um Basis and soon an Israeli armoured brigade was astride the vital lines of communication west of Um Qataf.

During the night of November 1-2 the Egyptian garrisons of Um Qataf and Um Shaykhan abandoned their heavy equipment and tried to escape westwards across Sinai; they ceased to play any part in the battle.

Two Egyptian armoured columns, both of more than a battalion's strength, moved out of the Canal Zone, one aimed at El Arish on the coast, the other (southernmost) at Bir Rod Salim. This latter force was caught east of Bir Gafgafa by Israeli planes on the morning of October 31, lost over 90 vehicles and withdrew, pursued by an Israeli armoured battle group.

During the night of October 31 the Egyptian position at Rafa near the Mediterranean coast was stormed, cutting off the Gaza Strip and opening the way to Port Said.

In the evening of November 1 an Israeli armoured brigade had fought its way to El Arish and the Egyptian High Command ordered a general retreat from Sinai.

In the central sector the Israeli airborne brigade ran into stiff opposition in forcing the Mitla Pass on November 1 but finally broke through and the last serious Egyptian resistance in Sinai was ended.

Israeli control of the air, the political and military confusion in Cairo over the Anglo-French invasion and the Israeli attack soon turned the Egyptian withdrawal into a rout in which officers abandoned their units and men their equipment.

Also in this phase the Egyptian destroyer *Ibrahim al-Awwal* was captured by combined Israeli Air and Naval Forces.

Phase 3, November 2-5

An Anglo-French ultimatum caused the Israelis to halt their advance 16 kilometres from the Suez Canal and this line was reached on November 2 near Ismailia and near Qantara on November 3.

The Gaza Strip was cleared of fedayeen strongholds during November 2 and 3 and an infantry brigade moved out of Ras el-Naqb on November 2 and reached the remaining Egyptian positions at Ras Nusrani only after a difficult and hard fought journey.

On November 2 an airborne battalion was dropped on the Egyptian airfield at El Tur and the rest of that brigade moved down the west coast of Sinai to join up with it on November 4.

Ras Nusrani was evacuated by the Egyptians and their last post at Sharm el Sheikh was stormed by the infantry brigade on November 5. On November 6 Britain, France and Israel accepted the UN cease-fire ultimatum.

Losses in the campaign

The Israelis lost an incredible 171 dead, several hundred wounded and four prisoners in this lightning affair, while the Egyptians lost several thousand dead and wounded, 6,000 captured and an immense quantity of tanks, guns, vehicles, ammunition and equipment.

The Egyptian Army had been caught off balance, trying to face two ways at once at the command of its political masters. The country's domestic disunity in this time of crisis was exceeded only by the lack of cohesive policy and action in the Arab camp generally. No effective action was taken by other Arab states to help Egypt as she collapsed under the triple assault. Israel could thus focus maximum resources against her chosen target.

Following the end of the military campaign, world political opinion united against the three invaders France, Britain and Israel and forced them to withdraw their forces from conquered territory. (France and Britain by December 22 1956 and Israel by March 8 1957.) For Britain and France this meant an irretrievable loss of political prestige and influence throughout the Middle East and Britain's decline as a world power was hastened considerably.

Israel kept the military hardware she had won but gave up the prisoners and evacuated Sinai and the Gaza Strip.

The United Nations Emergency Force (UNEF) was inserted as an insulator between the belligerents on the Egyptian side of the frontier and at Sharm el Sheikh to ensure free access for Israeli shipping into the Red Sea. Israel made it plain that any change in these arrangements would constitute a casus belli.

Egypt, incredibly, came out of this war the winner

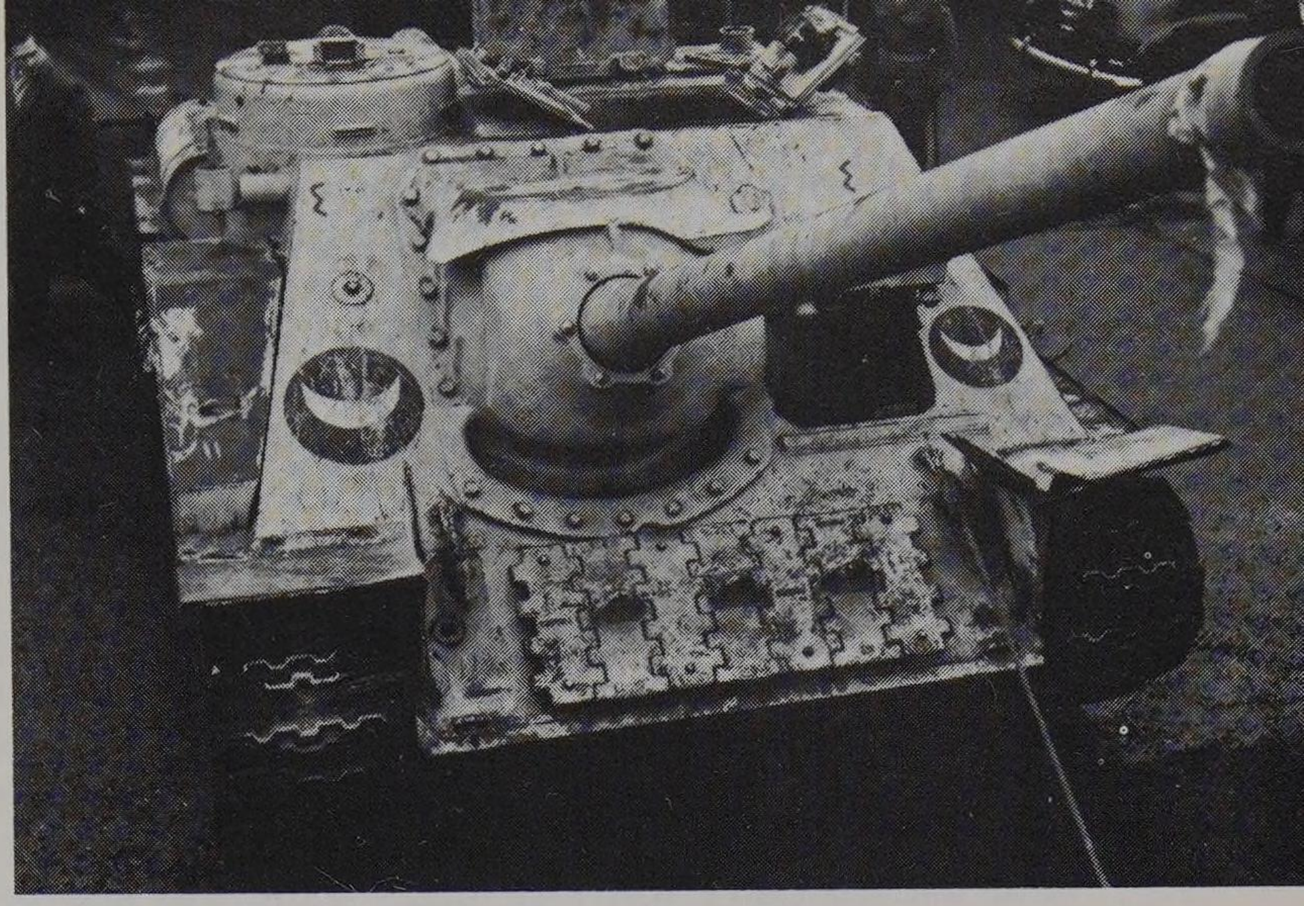
in terms of politics and world sympathy. Her connections with the Eastern Bloc were intensified and huge Soviet arms shipments soon replaced the equipment lost in Sinai. Soviet advisers arrived and the Egyptian Army was soon developing into a carbon copy (at least superficially) of that of any Warsaw Pact state. One vital underlying factor in the 'new model army' was, however, missing and that was the political structure of a Soviet-style state. Egypt was still struggling to bring her society into the 20th century and the disadvantages of such a relatively under-developed social system were still to make themselves felt in the military machine of future campaigns.

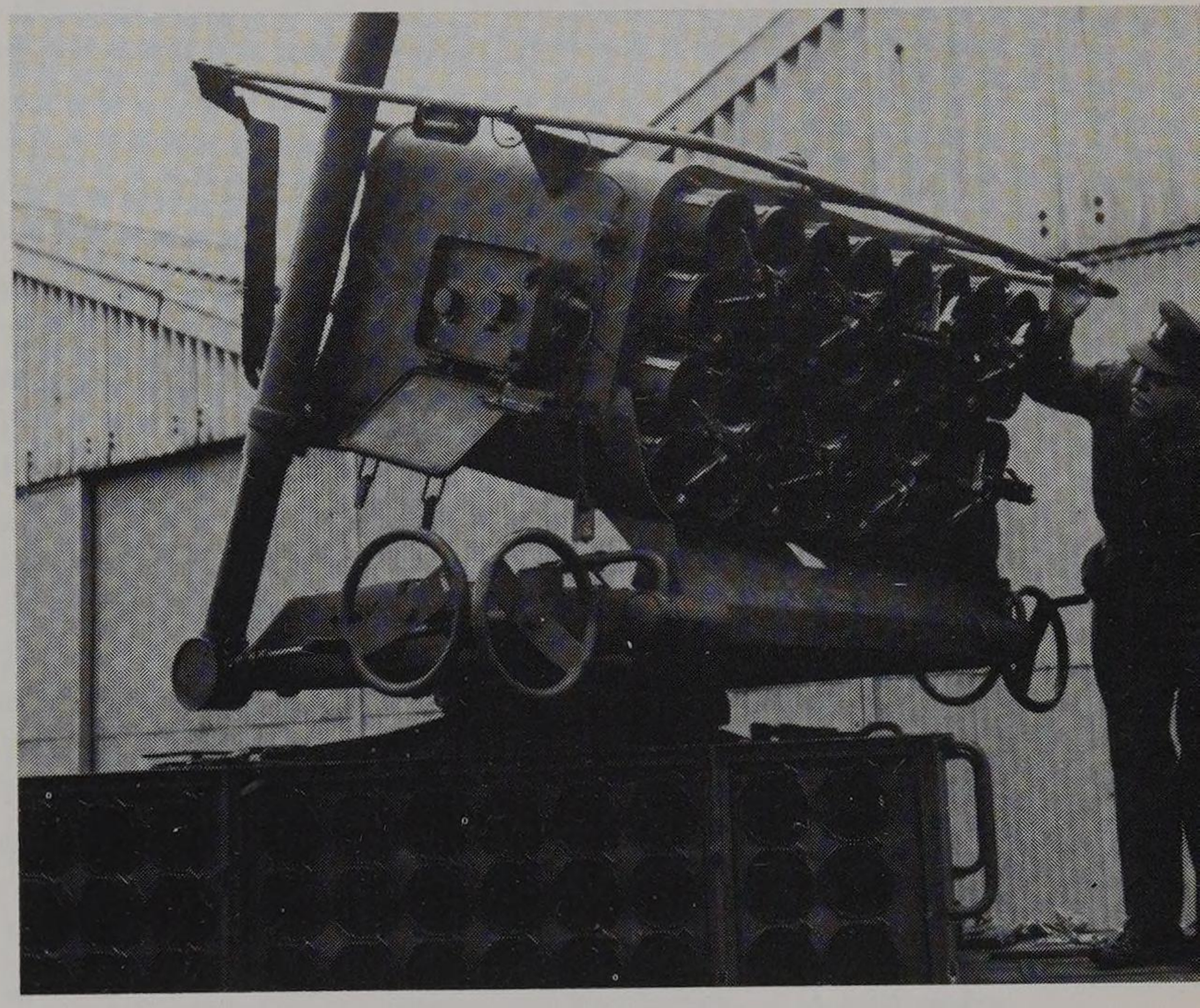
The Jebel Akhdar campaign in Oman

The first hint of trouble in the north of Oman came in 1952 when Saudi Arabian forces (reputedly with transport and logistic help from the ARAMCO oil company) seized the Buraimi oasis. Britain prevented the Sultan of Muscat from launching a counter-attack and took the dispute to international arbitration in Geneva. Negotiations dragged on for three years until the Trucial Oman Scouts (TOS) expelled the Saudi Arabian garrison in a swift and bloodless coup in 1955. In the intervening time, however, the oil-rich Saudis had bought the loyalty of the fickle Omani tribes in the north of the country in time-honoured Arab fashion and a new Imam (Ghalib bin Ali) had been elected. Ghalib was a Saudi puppet and his brother, Talib (who was Wali of Rostaq) joined forces with the inland tribes and became their military leader. He was also the driving force of the subsequent rebellion against the ultra-conservative regime of the old Sultan of Muscat who still enjoyed the support of the coastal Omani tribes.

The rebels were joined by Suleiman bin Himyar, Sheikh of the Beni Riyam in the Jebel Akhdar (Green Mountain) and by Sheikh Salih bin Isa of the southern province of Sharqiya. The spark which set off the rebellion was a dispute between the Sultan and the Imam over who had the power to grant oil prospecting rights in the inland areas. The Imam was supported by the Saudi Arabians, Cairo radio and certain US oil interests whose motives were financial more than political.

In December 1955 the Sultan decided to enforce his rights with military back-up and sent the Muscat and Oman Field Force (MOFF) to occupy Izki, Nizwa, Ibri and other inland villages to bring the area under control. The MOFF was a very low-key military organisation, numerically limited and possessing only light weapons, but even this show of force was





Top *An SU-100 assault gun captured in 1956 by the British Army* (Soldier magazine). **Above** *A Soviet-built, 32-barrelled rocket launcher — captured in Egypt 1956 being inspected by a Lieutenant Colonel RAOC* (Soldier magazine). **Below** *A Soviet-built BMP APC on parade in Egypt* (Christopher F. Foss).



enough to bring about Ghalib's abdication as Imam and the end of the revolt. Talib and Salih bin Isa fled to Saudi Arabia and Suleiman bin Himyar withdrew with his supporters up on to the Jebel Akhdar where he was safe from the Sultan's forces.

The Jebel Akhdar is a fertile plateau 80 kilometres by 32 kilometres over 6,000 feet above sea level with steep, cliff-like sides rising abruptly from the surrounding plain and having very few access routes, all of which are easily guarded and blocked. It forms the ideal bolt hole for a weak force successfully to resist a numerically superior enemy and the presence of villages and cultivation on the top of the Jebel Akhdar ensures supplies of food.

For a time there was stalemate; Talib was active recruiting and training more rebels in Saudi Arabia and in May 1957 he infiltrated Jebel Akhdar and Sharqiya provinces and revolts broke out in both. That in Sharqiya was over very briefly but Talib pulled back into the Jebel Akhdar and joined Suleiman bin Himyar. The MOFF followed Talib's men up the mountain tracks, walked into a well-laid ambush and were almost wiped out. The Imam re-entered Nizwa in triumph and the Sultan's position was alarmingly weak. British help was rapidly on the spot, however, in the shape of a company of the Cameronians and a detachment of the TOS from Sharjah. Together with the remnants of the MOFF they recaptured Nizwa whereupon the rebels withdrew to the top of the Jebel Akhdar again.

From 1957 to 1958 the rebels, safe in their stronghold, slipped out frequently to lay small US Army mines (supplied originally to the Saudi Arabian Army) on the roads around the plateau to catch the Sultan's patrols as they carried out their 'watch-and-wait' task. In 1958 Britain agreed to help the Sultan expand his Army and the Sultan's Armed Forces (SAF) was established. Apart from equipment and training advisers, the first uniforms for the Omanis were introduced. Recruitment into the SAF was from two sources — Baluchistan (in Pakistan) which has long connections with the Omani sultans in the provision of martial aid was giving about 70 per cent of the men; and Omani Arabs, enlisted for the first time, provided the other 30 per cent. Most officers were seconded from the British Army, as were the technical and logistic experts.

In 1958 the Jebel Akhdar war was stepped up when the rebels began using American anti-tank mines supplied originally to the Saudi Arabian Army; Omani protests were rejected by the Americans. The SAF kept up an intensive patrolling programme around the Jebel Akhdar, testing rebel security and searching for new and unguarded routes to the plateau. Air power was now available to the Sultan with Shackletons and Venoms bombing and strafing known rebel positions. An assault on the plateau was planned now that the SAF was sufficiently strong to take the field (it now had four battalions — Muscat Regiment, Northern Frontier Regiment, Desert Regiment and the Jebel Regiment) and would be working with D Squadron 22nd SAS and D Squadron Life Guards in Ferret armoured cars. The preliminary operation was to capture Tanuf village and thus to cut a main rebel supply route — the operation was successful.

In November 1957 there came a breakthrough for the SAF when a patrol of the Muscat Regiment discovered an unguarded track on the north side of the plateau leading from Awabi to Hijar. With great speed a force composed of two troops of D Squadron 22nd SAS and a platoon of the Muscat Regiment climbed the track and dug in north of Hijar village. In December Hijar was assaulted and captured by a squadron of the TOS and the SAF now had a foothold on a ledge half-way up the jebel. They were not yet at the top, however, as their way was still barred by rebel positions on the Aqabat al Dhafar and there were insufficient forces available to break through on to the plateau and to block all the possible enemy escape routes. In January 1958, however, A Squadron 22nd SAS joined the Sultan's troops and plans for the final assault went ahead. The rebels' attention was now, quite naturally, concentrated on the major threat from Hijar and the attackers decided to mount a feint assault here while the real thrust would go in from the south up the Kamah-Habib valley. The southern assault force consisted of A and D Squadrons 22nd SAS with C Company of the Northern Frontier Regiment and one troop of the Life Guards (dismounted); the assault went in at dawn on January 27 1958 and encountered negligible resistance as most rebels were deployed on the Aqabat al Dhafar and in positions blocking the Tanuf track. Brushing aside surprised rebels in Habib, the assault force moved quickly on to occupy the villages of Saiq and Sharaijah, the rebel headquarters. Surprised and surrounded, the rebels gave up after a brief struggle and the Jebel Akhdar campaign was over.

The Yemeni civil war, 1962-1969

In common with many Arab rulers, the Imam of the Yemen had traditionally ruled his land by the careful and tortuous policy of playing the greed and loyalty of one tribal group off against the others.

Crown Prince Mohammed al Badr had been sent to Egypt for training by his father, the Imam, in 1956 and on his return he had brought with him Egyptian

influence and advisers who were quickly followed by eager Russian and Chinese technicians.

On September 26 1962, two weeks after the death of the Imam, Mohammed al Badr's Chief of Staff (Brigadier Abdullah Sallal) staged a successful coup. Mohammed fled with some supporters into Saudi Arabia and found ready support for his struggle against the republican usurpers. Royalist Jordan also offered aid. Egyptian forces now flooded into the Yemen to secure the republican regime and by April 1963 they numbered 36,000 men. Villages in areas loyal to the Imam were bombed with gas as well as high explosive. Evidence of these gas attacks was laid before the UN but until 1967 that body steadfastly turned a blind eye.

The royalists received money, arms and advisers from Saudi Arabia and Jordan but American pressure forced Jordan to withdraw her military instructors. Sherif Hussein in Aden also sent weapons to the Yemeni royalists. The republicans had by now occupied all major towns and the royalists were forced out into the rough country and the villages. On December 19 1962 the republican regime was recognised by the UN and the USA; American recognition of a pro-Communist regime being motivated possibly by eagerness to undermine British status in the area and by reasons of oil policy.

As the royalists had only light weapons to counter the tanks and artillery of the republicans, circumstance should have convinced them to employ classic guerrilla hit-and-run tactics against their foes' static strong points and logistic re-supply convoys. However, the royalist leaders were unreasonably possessed with the idea of capturing cities as the first step. Their support was based mainly in the northern tribes (the Zeidi) and involved the Bakil tribal confederacy. The republicans were mainly in the south of the country and were supported by the Hashid tribal confederacy. The royalist forces lacked for many things but most of all perhaps they needed an aim, a clear understanding of how to achieve it and a communications system to make their scattered forces respond to the strategic needs as defined by their commanders.

Foreign mercenaries were engaged by the royalists to counter the Russians and Chinese on the republican side. They were specialists and few in number — about 30 French and Belgians and 18 Britons. They operated in small teams of an officer, an NCO radio operator and a medical NCO and moved with formation HQs to provide vital radio communications. Their training base was at Khanja.

In July 1963 an Egyptian offensive failed badly, but the score was evened on March 24 1964 when the Imam's assault on the Egyptian garrison at Hajjah turned into a debacle. Another Egyptian offensive in October 1964 from Haradh into north-east Yemen bogged down in the rain and mud and was repulsed with heavy loss including ten tanks and half the armoured vehicles involved.

King Saud of Saudi Arabia abdicated in November 1964 in favour of Crown Prince Feisal and Saudi support for the Yemeni royalists was now firmer than before.

By March 1965 there were over 60,000 Egyptian troops holding the coastal plain, most of the south of the country and the main towns from Sana to Sada and Marib, Harib and Hazm. The royalists held the mountains in the north and north-east, the centre and east of the country. They had about 50,000 more or less full-time warriors with a further 200,000 tribesmen in their catchment area. Lack of success led to discord in the royalist camp; the Saudis complained that they poured arms and vast sums of money into the fight and the royalists wasted it all and did nothing. The royalists in their turn alleged that Saudi support was always too little and too late to be effective.

In April 1965 an Egyptian convoy was successfully ambushed by royalists on the road north of Hazm near the gorge of Humeidat. After capturing the road the royalists held it and Egyptian garrisons in south and east Yemen had to be supplied by air. By now the royalists had French mortars (81 mm and 120 mm), bazookas and a few 75 mm mountain guns. Four Iranian officers were now sent to the Yemen to observe on the guerrilla war and to assess the potential for Iranian support of it. Royalist re-supply was now partially by air from Saudi Arabia using charter planes piloted by civilians.

By the summer of 1965 the royalists were getting the upper hand and the Egyptians were withdrawing from outlying garrisons; Brigadier Sallal retired to Egypt in October 1965, possibly finding the climate healthier there. President Nasser met King Feisal of Saudi Arabia in Jedda in August 1965 and concluded the Jedda Agreement by which the Egyptians were to withdraw all their forces from the Yemen by September 23 1966. There was to be an immediate cease-fire in the Yemen and the Saudi Arabians, for their part, were to stop aiding the Yemeni royalists.

The Egyptians subsequently broke the cease-fire but by February 1966 their troop level in the Yemen had fallen from 70,000 to 20,000. Then came the fateful decision by the British Government to announce by means of the Defence White Paper their withdrawal from the Persian Gulf and all areas east of Suez. This was a body-blow to all Arab governments which hitherto had placed their trust in the word of the British 'gentlemen' and had formed their foreign and defence policies on that cornerstone. At once the Yemeni royalists were placed at a disadvantage while

their republican enemies were correspondingly elated. They were also reinforced by up to another 40,000 Egyptian troops.

In October 1966 Egyptian planes bombed royalist supply bases at Najran and Jizan in Saudi Arabia; an exercise which was repeated in January 1967.

In June 1967 the third Arab-Israeli war broke out and most Egyptian troops in the Yemen were hastily withdrawn, but much military hardware was left behind for the republicans to use and they now began to receive aid from the USSR. Even so, determined royalist pressure might have won the day but it was sadly lacking. They asked for Iranian aid in August 1967 and it was agreed that this would be provided, but another blow came in September 1967 when the National Liberation Front seized power in the neighbouring Aden Protectorate (South Arabian Federation) as the British left one of their last remaining colonies. The resultant left-wing regime was anti-royalist and all the support from Aden which had previously been enjoyed by the royalists now ceased and was replaced by active pro-republican policies. In October of that year, Nasser agreed to stop supporting the Yemeni republicans in return for financial aid from Saudi Arabia and Kuwait to replace the lost Suez Canal revenues and for a guarantee that Saudi Arabia would stop supporting the Yemeni royalists. At about the same time the first deliveries of Iranian arms (106 mm recoilless rifles, 120 mm mortars and some Vickers MMGs) were air-lifted into the royalist base at Amara.

Brigadier Sallal, absent again on a visit to Baghdad and Moscow, was deposed from the Yemeni republican leadership in a bloodless coup led by Army officers on November 5 1967 and General Hassan al Amri became the new leader. By the end of December 1967 the royalists had surrounded Sana, captured Amran and cut the supply road to the republican garrison at Hodeidah, but these momentary flashes of amateur success were not durable against the growing pressure of Soviet arms, equipment, training and advisers enjoyed by their republican foes. On February 8 1968 the republicans broke through from Hodeidah to Sana and the tide turned inexorably against the dilletante royalists. Soviet gold lured tribal support away from the royalists; Hajjah and Sada fell to the republicans, and in July the royalist commander in Khowlan, Amir Abdullah ibn Hassan, was assassinated. A compromise was achieved and a coalition government was set up in the Yemen including royalists, republicans and the Third Party. Fortunately, Egypt and Saudi Arabia both supported this move and the war ended. Soviet influence in the country was reduced somewhat and peace has been maintained in that corner of the Arabian peninsula ever since.

The Six Day War, June 5-10 1967

Following the 1956 war, Egypt and Syria had been linked politically in the short-lived United Arab Republic (UAR) and on July 14 1958 King Feisal of Iraq was deposed, killed and the subsequent government overthrown by General Kassem. His unstable regime lurched into the Soviet sphere of influence and Russian arms, advisers and 'diplomats' were now to be seen in large numbers in Iraq, Syria and Egypt. The Western powers were naturally concerned at the growth of Communist influence in the Middle East as the British presence dwindled. The influx into Jordan, Lebanon and Syria of thousands of Palestinian refugees ejected from their homes in 1947 had introduced dangerous and unstable forces into the domestic politics of these countries. The effects of this were seen ten years later when, in 1958, civil war broke out in the Lebanon and was suppressed by marines of the US 6th Fleet at the request of President Chamoun. In neighbouring Jordan Britain rushed in military support to bolster the uncertain regime of King Hussein which was being subverted by Egyptian and Syrian agents.

In 1964 an Arab summit conference in Cairo decided to proceed with plans to divert the Jordan river and thus to deprive Israel of water. Work on canals began in Lebanon and Syria; the scheme was to divert the Hazbani in Lebanon and the Banias in Syria into the Yarmuk river in Jordan. Realising the seriousness of the threat, the Israelis replied by disrupting the work with tanks, artillery fire and bombing. By December 1964 it was clear to the Arabs that further work on the scheme would mean war with Israel and it was abandoned.

Due to the presence in Sinai of the UNEF, Egypt found it impossible to mount terrorist attacks against Israel and thus transferred her efforts to Syria and also to Jordan via the Palestine Liberation Organisation (PLO — raised in 1964) and its military wing, Al Fatah.

The Egyptian Army in 1967 was also heavily involved in the Yemeni civil war in support of the republican party, there being about 40,000 Egyptian troops there. Saudi Arabia (and Jordan) were sympathetic to the Yemeni royalists — there were thus still deep divisions among the Arab powers.

Israel had stayed within her 1948 borders which were ludicrously inadequate from the viewpoint of military security. Being continuously concerned for her territorial integrity and surrounded by hostile states who denied recognition of her right to exist, Israel was dangerous, like any frightened animal.

The IDF, its morale boosted by the successes of

1947-1948 and 1956, was now a finely honed, highly competent fighting force with which the nation identified completely.

1967 was an unsettled year in the Middle East; Greece and Turkey were rattling sabres over the Cyprus issue; in February Iran agreed to buy $110 million worth of arms from the USSR and in March Syria and the UAR (Egypt) concluded a mutual defence pact. Britain was withdrawing from Aden and the struggle for power was already in full swing in the foredoomed South Arabian Federation.

Under provocation of continued Al Fatah raids from Syria and Jordan, Israel had launched large-scale military reprisal raids against Jordan in November 1966 and Syria in April 1967; Egyptian aid for her stricken colleagues was conspicuously absent. On April 7 the IDF shot down six Syrian MiG fighters and on May 11 and 13 the Israeli Prime Minister (Levi Eshkol) warned the Arabs that Israel would respond to further Al Fatah attacks 'at the place, the time and in the manner we choose'. Thus the spiral of escalation took another dangerous twist.

At about this time Russia increased the tension by warning Egypt and Syria of the impending danger of an Israeli attack.

Since the debacle of 1956, the Egyptian Army had been expanded, re-equipped, retrained in Soviet military doctrine and Nasser now judged the time right to launch it to revenge its past defeat. On May 14 1967 Egyptian forces entered Sinai and began to close up to the Israeli border; on May 16 Nasser requested withdrawal of the UNEF from Egyptian territory, both she and Syria mobilised their forces, to be followed by mobilisation in Jordan next day.

The UNEF began to withdraw from the Gaza Strip and the Sinai border on May 19 and two days later Egypt and Israel mobilised their reserves and the PLO was put under Arab military command. On May 22 Egypt closed the Straits of Tiran to Israeli shipping (Israel had not been allowed to use the Suez Canal since 1948) and on May 24 Egypt claimed sovereignty over the Gulf of Akaba while a force of Saudi Arabian troops moved into Jordan. Pledges of armed assistance tumbled in from other Arab states in the next few days: Algeria on May 29 and Morocco on May 30. Jordan joined the Egyptian and Syrian defence pact on May 30 and Iraq on June 4, the same day that Libya also promised armed aid to Nasser and one day before the Israelis opened their second pre-emptive offensive. Another major factor in the process which caused Israel to go to war in 1967 was her lack of confidence in the international guarantees of her safety given by the Western Powers.

Incredible as it may now seem, President Nasser managed to redeem his popularity with the masses in Egypt and other Arab states even after having lost the 1956 war, having failed for five years to crush the ill-armed royalists in the Yemen and after being at daggers drawn with both Jordan and Saudi Arabia.

The world looked passively on as apparently certain destruction stared Israel in the face and even France, traditional supporter of the Jewish cause, seemed to abandon her in a bid to increase her influence in the Arab world.

Although there was a show of Arab unity, the new plant was so tender that it wilted under the Israeli pre-emptive assault and the supreme Arab staff, headed by the Egyptian General Riad, may have issued orders but to little effect.

Israel took advantage of operating on internal lines, seized complete control of the air on all fronts, and from that point on the final outcome of the war was merely a matter of time.

The IDF was commanded by Major General Yitzhak Rabin for this operation and had been mobilised since May 20. On the morning of June 5 the Israeli Air Force, commanded by Brigadier General Mordekhai Hod, struck hard at the opposing Arab

Balance of Forces 1967

	Men	Tanks	Armoured Divisions	Infantry Divisions	Aircraft
Egyptian forces in Sinai	100,000	1,000+	2 divisions	5 divisions 2 mech brigades	550
Syria	50,000	500	2 brigades	5 inf brigades	120
Jordan	50,000	300	1 brigade	3 brigades	40
Saudi Arabia	4,500	10	—	5 brigades	40
Iraq	10,000	150	1 division	4 divisions	200
Arab Total*	250,000	2,000	3 divisions and 3 brigades	9 divisions and 15 brigades	950
Israel in Sinai	45,000	1,700	7 brigades	4 mech brigades 15 inf brigades	400+

*Contingents from Kuwait and Algeria also took part.

Air Forces and their airfields, flying low to keep under hostile radar screens. In less than three hours the bulk of the Egyptian Air Force had been destroyed on the ground at 19 airfields and the Air Forces of Syria and Jordan had ceased to exist. Some Iraqi planes were also destroyed. Total losses were 461 Arab planes (of those only 60 managed to get airborne before being shot down) against 19 Israeli planes lost.

Following this brilliant success, IDF ground forces were free to operate without threat of air attack and with the advantage of close air support against an enemy devoid of any air cover.

The Sinai Front

The Israeli commander here was Brigadier General Yeshayahu Gavish and his forces were divided into three 'divisional task forces' commanded (from north to south) by Brigadier Generals Israel Tal, Abraham Yoffe and Ariel Sharon.

Egyptian dispositions in this campaign were similar to those adopted in 1956: from north to south — the Gaza Strip to Khan Yunis; Rafa to El Arish along the Mediterranean coast; the Abu-Aweigila-Quseima complex with the Jebel Libnie-Bir Hassneh position in second line and the Kuntilla-Thomad-Nakl crescent in the southern flank.

The Israeli assaults also bore a marked resemblance to those mounted in the previous campaign with the difference that in 1967 the 'left hook' in the south came in more towards the end of the fighting than at the beginning.

'S' Brigade of Tal's force drove west in the morning of June 5 through the enemy positions at Sheikh Zuwaid, El Jeradi and El Arish, bypassing opposition to achieve depth of penetration and were at the latter point that evening.

Tal's other brigade swung north-east up into the Gaza Strip — taking it in the rear — and were about halfway along it by nightfall.

Yoffe's force passed between the major Egyptian defended localities in the north and centre of the front, moving over trackless desert, and by the morning of June 6 was in the area of Bir Lahfan and holding the road south from that place to Abu Aweigila. Thus Yoffe was well positioned to strike at any chosen target of the three major Egyptian forces in the area, two of which were now outflanked.

Sharon's force carried out a night attack into the Egyptian complex around Um Qataf-Quseima and threatened the vital crossroads at Abu Aweigila. A dismounted infantry brigade marched through the sand-dunes to assault the Egyptian positions from the north and an airborne brigade was landed by helicopter on two Egyptian artillery positions (Abu Aweigila and Um Qataf) and destroyed them.

These gains were consolidated by an armoured brigade which passed through Abu Aweigila on the morning of June 6, defeated an Egyptian armoured battalion en route and broke out towards Jebel Libnie in the rear.

Bitter fighting continued in the Gaza Strip on June 6 but at the end of that day Israeli infantry and paratroops had captured the Ali Muntar Hill overlooking Gaza town itself.

On June 6 Tal's force fought a fierce tank battle to take the El Arish airfield and then pushed on in two directions, one brigade pushing west to Mistaq, the other south to Bir Lahfan where it attacked the fiercely defended Egyptian positions.

Tal's and Yoffe's forces now advanced in a concerted thrust south-westwards on the Egyptian reserve positions at Jebel Libnie and Bir Hassneh, moving on under the protection of Israeli planes which blasted the enemy positions in their path.

In the Gaza town area a reserve infantry brigade assaulted and took the place after having overcome extremely stiff opposition.

On June 7 Tal's force continued to push westwards on two axes, the northern brigade reaching the salt marshes at the northern end of the Suez Canal and the southern one (operating with Yoffe's force) captured the Egyptian logistic base at Bir Gafgafa and defeated the subsequent armoured counter-attack — the last serious offensive Egyptian tank thrust in the campaign.

Yoffe's force captured the Bir Hassneh position and then seized the Jiddi and Mitla passes, thus cutting the escape route for the Egyptian Army still milling around in confusion in the centre of the Sinai peninsula. Part of Sharon's force moved south-west on Nakl to cut off those Egyptian forces in the southern position while other units of his force kept up pressure on Kuntilla. On June 8 the Egyptian forces in this southern crescent fell back west towards the Mitla pass which was now blocked to them. Under constant air attack and harassed by Sharon's victorious units, this Egyptian formation soon ceased to exist as a fighting force. A fierce battle, involving over 1,000 tanks, now developed at the Mitla pass and ended with an Egyptian defeat — the trap had been sprung.

Also on June 8, Tal's northern brigade reached Qantara and turned south, his southern brigade got to Ismailia where both brigades met on the Suez Canal. They then turned south and pushed on to Suez, being joined by elements of Yoffe's force from the Jiddi and Mitla passes.

Other elements of Yoffe's force captured Ras Sudar on the Gulf of Suez and moved on Abu Zenima where they met up with an airborne battalion, moving north from Sharm el Sheikh, which had been cap-

tured by them in conjunction with Israeli Navy units.

The campaign in Sinai was over, the Egyptian Army lay shattered or disorganised in the trap formed behind the Jiddi and Mitla passes.

The Jerusalem-Jordanian Front (Brigadier General Uzi Narkiss)

Israeli plans for capturing the West Bank area of Jordan had been carefully laid and were similar in concept to the German attack on Poland in 1939. The aim was to attack the Samarian region south from Nazareth and north from Jerusalem while making holding attacks in the west to pin the Arab Legion down in their front line positions. Those Jordanian forces in Judea would be pinned against the Dead Sea by a thrust south from Jerusalem.

Any Jordanian attempts to pull back east to safety over the obstacle of the Jordan river would be extremely hazardous, particularly by day, because Israel had complete air superiority. A further factor against the Jordanians was that there were only three major bridges over the Jordan (the Damiya, Allenby and Abdullah) which could all easily be blocked by air attack and the Arab Legion was cut off from its base in the south-east by the Dead Sea.

On the morning of June 5 the Israeli Government sent a message to King Hussein of Jordan via General Odd Bull of the UN Truce Supervision Organisation offering to leave Jordan in peace unless attacked by her first. Hussein's answer was a heavy artillery barrage (he had already lost his Air Force) centred on Jerusalem. He also sent a battalion to occupy Government House on the Hill of Evil Council in that city but they were driven out again by the Israeli Jerusalem Brigade who pushed on to capture Sur Bahir on the Bethlehem road. An Israeli armoured brigade broke into Jordanian positions to the north of the Jerusalem Corridor and captured Maale Hahamishah and Sheikh Abdal-Azziz. Another breakthrough followed at Beit Iksa and these forces then went on north on June 6 to capture the Arab Legion positions at Bidu and Nebi Samuel. They reached the main road north from Jerusalem just south of Ramallah at Tel al Ful which was captured after a hard-fought tank battle.

Another Israeli infantry brigade made a night attack on June 5-6 on Latrun, capturing the village and the police post, and next day moved east to join up with the other Israeli forces at Ramallah.

Also during the night of June 5-6 an Israeli reserve paratroop brigade (commanded by Colonel Mordekhai Gur) attacked the two Jordanian infantry brigades holding the positions to the north-west and east of Jerusalem. After fierce fighting around Ammunition Hill and the Police School, in which the paratroopers suffered very heavy casualties, the Israelis captured Sheikh Jarrah, the American Colony and the Rockefeller Museum, thus making contact with the Jewish enclave on Mount Scopus which had been isolated by the Jordanians since 1947.

Meanwhile the struggle for control of the vital Ramallah cross-roads continued and after overcoming fierce resistance Ramallah was captured by the Israelis. In the central sector too, the unchallenged Israeli air supremacy was proving decisive.

On June 7 the Jordanian-held Old City of Jerusalem was assaulted through the Lions' Gate by Israeli paratroops and armour and after a brief struggle the Star of David flag was hoisted over Temple Mount. The Wailing Wall was in Jewish hands again!

Also on that day, the armoured brigade which had taken Ramallah advanced east towards Jericho, with infantry moving north from Ramallah to link up with Jewish forces from the Northern Sector just south of Nablus.

The Jerusalem Brigade advanced south out of the city, recaptured the Etzion Block of settlements (lost in the 1947 campaign) and went on to take Bethlehem and Hebron without firing a shot as the Arab Legion garrison had already been pulled back north-east to safety.

The remnants of the Jordanian forces were pushed back over the Jordan at the Allenby and Abdullah bridges and the West Bank was now in Jewish hands; Brigadier General Chaim Herzog was appointed its military governor.

Northern Command (Brigadier General David Eleazar)

On June 5 an armoured brigade with additional infantry support assaulted the Arab Legion defence complex around Jenin and became involved in a heavy tank battle with the Jordanians who moved up reinforcements from the Jordan river area. The furious struggle continued all day but eventually the IDF gained the upper hand and the Arab Legion fell back slowly south-east on the Damya bridge over the Jordan.

On June 6 another attack was put in from the west against Tulkana and Qalqilya and threatening the rear of the Jordanian armour at Jenin. This pincer movement was successful and the Jordanians withdrew eastwards under air attack on June 7.

On June 8 the West Bank was in Israeli hands.

The Golan Heights

Using her internal lines, Israel had decided to hold in the north while striking first in the south and centre and then to transfer forces to the Syrian front for the final blow. The Syrian Air Force had been destroyed on June 5 and this no doubt caused their Army to

move with utmost caution, their offensive action being restricted to artillery bombardment of Israeli targets.

On Friday June 9 at midday a combined Israeli air and ground attack was launched on the Syrians in their carefully sited and constructed defensive belt in the Golan Heights. The northern end of the front was chosen by the IDF for the break-in and two armoured brigades with one infantry brigade were launched at Tel Azaziyat and nearby Banias.

The Syrians fought back fiercely and Israeli gains were bought at heavy cost in men and tanks, but progress was made at both points; particularly heavy fighting took place at Tel Fakhr.

After breaching the first Syrian line, the southernmost IDF armoured brigade raced on for Mansura and Quneitra to the south-east and on the main road to Damascus.

Additional IDF formations were now moved into the Golan struggle; Brigadier General Elad Peled's brigade came north from the West Bank front to attack around the southern tip of the Sea of Galilee, through Tawfiq and on north-east through Fiq and Elal while another armoured brigade came on through Darbashiyya. Syrian resistance crumbled under these blows and the Israeli Air Force made reinforcement and re-supply of their front line troops almost impossible. By 1430 hours on June 10 the town of Quneitra fell to the IDF which pushed on north-east towards Sasa and south towards Rafid.

The Syrians, their Air Force and Army non-effective, sought a cease-fire via the UN and the Israelis were content to consolidate their gains and mop up in the areas of the Golan Heights.

The war at sea

The IDF Navy was commanded by Rear Admiral Shlomo Erel and on June 5 they made a frogman attack on the Egyptian Navy in Alexandria and succeeded in penetrating the harbour defences although losses among the men involved were high.

On June 7 a naval landing force took Sharm el Sheikh on the Straits of Tiran and reopened that waterway to Israeli shipping.

The losses of the war

In six days Egypt, Syria and Jordan had lost their Air Forces and had their Armies defeated and severely mauled. Egypt alone lost 800 tanks in Sinai.

The Arabs lost over 15,000 dead and wounded with 6,000 prisoners having been taken; each of the three belligerents had lost territory to Israel.

Israeli losses were 777 killed, 2,586 wounded and a handful of prisoners lost, mainly pilots or frogmen. The Israelis managed to *gain* 190 tanks.

The causes of the Egyptian defeat in 1956 and 1967 had three things in common: firstly, there was no effective unified Arab political control. Secondly, there was no effective unified Arab military command. Finally, the Egyptian Army in both campaigns was trying to face two ways at once; in 1956 east and west in Sinai; in 1967 against the Jews in Sinai and against the royalists in the Yemen.

Effects of the war

The Suez Canal had been blocked by the Egyptians early in the campaign and was to remain so for almost seven years. This hastened the development of the supertanker and the building of oil pipelines in the Middle East. The Suez Canal has now been reopened but many of the giant tankers now in service cannot use it when laden; plans are, however, being implemented to widen and deepen the canal to accommodate these huge vessels. Jordan and Egypt received subsidies from Kuwait ($154 million), Saudi Arabia ($140 million) and Libya ($84 million) to replace the lost canal revenues and to repair damage; Jordan having $112 million and Egypt $266 million per annum.

During the Six Day War about 100,000 Arabs fled from the West Bank to the East Bank of the Jordan river and when it became clear that Israel would keep control of those parts of Syria, Jordan and Egypt which she had captured, tens of thousands more left the West Bank to join their families and to increase the problems of the Palestine refugees.

After some months the Israelis opened the bridges over the Jordan and allowed relatively free passage of people and goods.

They have also built settlements in the captured areas and these are proving to be a stumbling block in the path of finding a peaceful solution to the intractable Middle East problem today.

Following her disastrous defeat in Sinai, Egypt was left effectively naked in the military sense, but the Soviet President Podgorny and his Chief of Staff Marshal Zakharov visited Egypt and Syria shortly after the cease-fire and agreed to replace up to 80 per cent of the equipment lost. Russian naval strength in the eastern Mediterranean was also increased.

Jordan refused Soviet military aid but her equipment losses were replaced by Britain and the USA.

The Arab oil states had placed an embargo on shipments to the 'imperialist states' during the war but this was lifted following the cease-fire.

During the Six Day War Russia had supplied Egypt with munitions and other equipment and in response to this the USA sent Israel arms shipments later in the campaign, as did (so it was rumoured) France.

The USA also subsequently sold arms to Lebanon, Saudi Arabia, Morocco, Libya and Tunisia.

Syria continued to sponsor Al Fatah raids into

Israeli-held territory from her own lands as well as from Jordan and in November 1967 the Israeli Air Force attacked Jordanian tanks in a more serious clash.

In mid-October 1967 an Egyptian Komar Class missile patrol boat sank the Israeli destroyer *Eilat* with a Styx SSM and in retaliation the Israelis shelled and largely destroyed the main Egyptian oil refinery at Suez.

The Six Day War left Israel holding relatively secure frontiers in the north (the Golan Heights and Mount Hermon), in the east (the Jordan river and the Dead Sea), and in the south-west (the Suez Canal and the Sinai peninsula). It has given her such a feeling of security that she is unwilling to bargain losses of captured territory against genuine guarantees of long-term peace by her Arab neighbours such as extended by President Sadat in 1977.

Events in 1967 proved that President Nasser still had no grasp of the interaction of politics and military strategy that had been so clearly demonstrated to him in 1956. The motivation for Soviet escalation of the crisis by warning Egypt and Syria of non-existent Israeli troop movements has yet to be explained. That it did the Soviets no good in Egypt has been proved by subsequent events.

One interesting sidelight on the quality of the military planning for and during the war was that on September 15 1967 Field Marshal Amer, Deputy Supreme Commander of the UAR armed forces (who had been arrested after the end of hostilities) committed suicide.

The Dhofar campaign in Oman

Dhofar, Oman's southern province, forms about one third of the area of the country. It has a fertile coastal plain around Salalah, the capital, with the rest of the area being mountainous, rough and arid. Metalled roads exist only in the coastal plain and from Salalah to Thumrait; an inland system of graded tracks links all major population centres.

While the coastal Dhofars are sedentary, agricultural and commercial creatures, the Jebalis (inlanders) are semi-nomadic and those living in the north of the province, bordering Saudi Arabia, are true nomadic Bedu.

From 1829 the Sultans of Oman have claimed sovereignty over Dhofar but in 1963 a group of Bait Kathiri Dhofars, trained at Dammam in Saudi Arabia, began attacking American oil company operations in the province. Discontent was caused by the medieval despotism of the then Sultan Said bin Taimur and was not generally anti-Omani in character. Internal support for this dissident group came also from sons of wealthy Salalah merchants being educated in Kuwait and Iraq.

In 1964 the Dhofar Liberation Front (DLF) was formed with the aim of breaking free from Oman, and it found wide support throughout the province; on June 9 1965 the DLF began to make armed attacks on government targets and in April 1966 an attempt to assassinate Said bin Taimur during a parade by the Dhofar Defence Force barely failed.

At a DLF conference at Hamrin in central Dhofar in 1968 Marxist socialism was adopted as the party doctrine and the name of the DLF was changed to 'Popular Front for the Liberation of the Occupied Arab Gulf' (PFLOAG). Renewed energy in the leadership led to a series of successful military operations and 30 rebel leaders went to China for training, while Chinese military advisers entered the province to assist in the fighting there. Rakhyut — a coastal town near the western border with Aden, now South Yemen — fell to the rebels in 1969 and they quickly extended their control to most of the jebel (mountain) including the Salalah-Thumrait road. Apart from Dhofar itself, the PFLOAG (now about 700 strong) began raiding in Oman and in the United Arab Emirates and on June 11 1970 they mounted an abortive attack on an Omani Army garrison at Izki (in central Oman) which triggered off the coup d'état by the present Sultan, Qaboos bin Said. Sultan Qaboos had been trained at the Royal Military Academy Sandhurst and was well aware of the urgent social and military needs of his country. He declared an amnesty for the rebels and put into effect the much needed civil reforms in health, education and development. This bold move robbed many PFLOAG members of their grievances and they desired to return to normal life. The Communist hard-liners, however, had no intention of giving up the struggle and in September 1970 they ruthlessly suppressed their wavering members — an action which caused a further 201 rebels to surrender to the government by March 1971. These redeemed rebels became the cadres for the local Home Guard raised by the Omani Government to counter the terrorist raids — the Firqat. Hand in hand with civil developments, the Omani military machine was expanded and re-equipped and, for the first time, Omanis were actively recruited into their own Army.

The situation now was that Omani governmental rule extended only around Salalah and the major towns in Dhofar, but in November 1971 a determined programme of re-conquest of rebel-held areas was mounted with Medinat al Haq and Tawai Atair in the east of the jebel now occupied. Tawai Atair was evacuated again in the monsoon season (June-

September) when air operations were impracticable. Also in November 1971 the Leopard Line — a series of outposts running from Mughsayl on the coast west of Salalah north-east into the jebel — was set up with the aim of cutting rebel supply lines from the now Communist-oriented Peoples Democratic Republic of Yemen (PDRY). This line was evacuated in the 1972 monsoon. In December 1971 the PFLOAG absorbed the NDFLOAG but Musallim bin Nufl — original leader of the DLF — surrendered to the government in Muscat. During 1972 Chinese support for the rebellion waned and Soviet weapons and supplies began to appear instead, once again from the PDRY. In an effort to cut this supply route, the Omanis set up blocking positions at Sarfait near the coast close to the border. The rebel reply was to attack the eastern coastal town of Mirbat on July 19 1972 but they were repulsed with heavy losses and pursued into their mountain hideouts. This was the rebels' last large-scale attack. By October 1972 they had been driven out of all areas east of Jebel Samhan and operations were extended into Jebel Aram and Wadi Khishayn.

Operation Hornbeam

A further block to rebel supplies was set up in September 1972 in the form of the Hornbeam Line — a series of outposts now linked by wire entanglements and mines — extending due north from Mughsayl on the coast to the Wadi Qaim.

In December 1972 some 80 PFLOAG members were captured in central Oman and Abu Dhabi, as was a quantity of Chinese weapons in the old pirate port of Sur.

During the 1973 monsoon, government forces remained on the jebel at Jibjat, Medinat al Haq and in the Hornbeam Line positions, but the garrison at Tawai Atair was again withdrawn. Following the monsoon, the government forces tightened their grip on eastern Dhofar and the area surrounding Salalah (Operation Diana). A campaign of civil improvements followed these military successes and reinforced the government's hold over the areas re-taken from the rebels. In December 1973 the Iranian brigade operating in Dhofar opened up the north-south road with simultaneous thrusts from Thamrait and Salalah and the road has been kept open since then. No government positions on the jebel were abandoned during the 1974 monsoon.

In August 1974 PFLOAG changed its name to the Popular Front for the Liberation of Oman (PFLO), in the hope of gaining foreign support from Persian Gulf states, and evidence of Cuban and Libyan support for guerrilla operations began to be found. Firqats were set up in newly pacified jebel areas including Jebel Kaftawt, Zeak, Ayun, Burj Kushaat and Ashinhaib; rebel reaction was negligible. British and Jordanian military engineers built over 200 kilometres of motor track in the jebel areas.

On December 2 1974 the Iranian brigade launched operations against major terrorist bases in caves at Sherishitti and Bait Handob in western Dhofar; after some hard fighting the Iranians were redirected to recapture Rakhyut on the coast and the Sultan's Armed Forces (SAF) took over the drive on the Sherishitti caves.

Rakhyut fell on January 5 1975 and the Iranians then constructed the Damavand Line running north from that town. The SAF assault on Sherishitti was only partially successful but much rebel ammunition was captured.

This latest phase of the fighting had brought the highest casualties to be sustained by both sides during the entire war.

On February 21 1975 an enemy regimental headquarters and large quantities of arms and ammunition were captured in an area west of the Hornbeam Line. Also the previously unentered Wadi Rishm, west of the Salalah-Thumrait road, was subjected to a battalion assault which met only minor opposition.

Between August and October 1975 further positions were set up west of the Damavand Line and a new line was constructed north from the coast to Sarfait.

Below *The Sultan of Muscat's Armed Forces. An 81 mm mortar in action in Dhofar, 1974* (P. Walton). **Right** *Helicopter re-supply in mountainous terrain in Dhofar with Bell UH-1H Iroquois* (P. Walton). **Inset right** *Soviet arms and ammunition captured in Dhofar by the Sultan of Muscat's Armed Forces* (P. Walton).





In late October the Sherishitti caves were assaulted for a third time and with success. Large quantities of munitions were captured and the remaining rebels in Dhofar began to slip away over the PDRY border north of the Sarfait line. SAF now advanced east from Sarfait to link up with their allies pushing on from Mughsayl and on December 1 1975 Dhalqut fell without a fight; two days later the two Army columns met up. For the first time in ten years the whole of Dhofar province was under government control.

Artillery bombardment of SAF positions at Sarfait from across the PDRY border continues; air attacks in reprisal bring periodic relief. The flow of surrendering rebels also continues and between October 14 and December 31 1975 over 222 gave themselves up.

While the military campaign has been won (mopping-up operations continue in central and eastern Dhofar), more resources are being devoted to the civil development programme of building bridges, roads, schools and hospitals and of drilling for water in currently arid areas.

The period 1967-1973

The Arab leaders were now at great pains to restore their image in the eyes of their people after the humiliating defeats in the lightning campaign of 1967. Being completely unable to compete with the Israelis in another full-scale war, political and economic actions were taken against them and against those who supported them.

Despite his military bankruptcy however, Nasser in 1969 began his war of attrition along the Suez Canal, the aim of which was to inflict casualties in an unacceptable degree on the Israelis and force them to relinquish captured territory. The Israelis constructed the Bar Lev Line along the east side of the canal — a rampart of sand some 20 ft high along which were 40 strongpoints, deeply set in the sand, reinforced with concrete and steel and having bomb-proof overhead protection. This line stretched from Qantara in the north, down to the northern end of the Great Bitter Lake and then continued from the southern end of the Little Bitter Lake to south of Port Tewfik. Behind this front line were about 20 supporting strongpoints, sited in depth and giving mutual fire support. Through the system, from north to south, ran a road and behind the line were mobile armoured forces, ready to counter-attack wherever needed.

There have been attempts to give this system the defensive character and value of the Lines of Torres Vedras, the Maginot Line or the Siegfried Line but this is erroneous. The Bar Lev Line was only intended as a 'trip wire'; it was sufficient of an obstacle to ensure that any attempt to force it would have to be made in strength and after considerable preparation, but its function was to delay and to warn, not to stop.

Students of military history will know that the defence of a river line calls for a string of outposts along the obstacle to detect initial enemy advances and to determine the strength and direction of his thrusts while larger formations, situated further to the rear, act upon the intelligence passed to them by the outposts and move to counter the most serious enemy threat.

The Israelis had thus studied their military history well in this respect and had drawn the right conclusions and taken the correct action. Egyptian artillery bombardments against the Bar Lev Line during the war of attrition caused the personnel casualties intended but retaliatory Israeli air raids easily penetrated the much-weakened Egyptian air defences and brought death and destruction almost to the outskirts of Cairo itself.

Egypt appealed to Russia for help and in the spring of 1970 Soviet SAMs, aircraft and advisers poured into the country to bolster up the anti-aircraft screen. The degree of improvement of the Egyptian air defences was such that gradually a stalemate was reached with the Israeli Air Force gaining respect for the increasingly dense system of radar, SAMs and AA guns.

Having stabilised the military front, Egypt and the other Arab lands now sought to exert pressure on Israel via the super-powers while frantically rebuilding and re-equipping their Armies from Soviet arsenals and preparing them for the next battle.

It must be remembered that both in 1956 and 1967 it was Israel who opened hostilities with massive, and extremely effective, pre-emptive air assaults which destroyed the opposing Air Forces, left the enemy ground forces naked and thus made Israeli victories certain.

The dreadful efficiency of these tactics was burned into the memories of the various Arab military and air staffs and it was resolved that in any future conflict, the first blow would be struck by them and that the absolute superiority of the Israeli Air Force must be countered.

As a result, the decision was taken to construct Egyptian and Syrian air defence networks at both high and low levels, so lavishly equipped with radar, SAMs, AA guns and personnel as to make the NATO air defence system laughably inadequate by comparison.

The other area in which the Israelis had consistently shown their superiority was armoured warfare. Not only was their equipment better than the Soviet produced T-54/-55s and T-62s but they handled it

more competently than the Arabs. It was in the confusion of a fluid tank battle, when the level of decision-making was often down to the commander of an individual tank, that the Israelis excelled over their less skilful opponents.

While the Arab states pressed their case politically, preparations went ahead in Egypt for the military operation needed to cross the Suez Canal, breach the Bar Lev Line and to take back at least part of the territory lost in 1967.

Training was most thorough and the Soviet equipment available for bridging the canal was among the best in the world. The security arrangements made to try and keep the plan from the Israelis were effective even in an age of satellite reconnaissance where, in the clear skies of the Middle East, both super powers must have known that something was afoot. The scale of these preparations and their attendant security screen compare favourably with British preparations for the battle of El Alamein in 1942.

Meanwhile, in 1972 the Arab-Israeli political negotiations reached stalemate and Anwar Sadat (who had succeeded Nasser in September 1970) realised that the longer this continued, the more world opinion would come to accept Israeli occupation of the Sinai, West Bank and Golan heights and the less likely it was that these lands would be returned to Arab control. There were by now 44 Jewish settlements in the territories taken in 1967 and this indicated that Israel had no intention of returning these areas to their rightful owners.

Having exhausted the diplomatic means of achieving their aim, Sadat and his Syrian allies resolved to fight again as soon as their Armies were fit for the task.

In mid-1972 however, Sadat fell out with the Soviets both over the quality of arms supplied and over the level of Communist interference in Egyptian affairs. He expelled the 20,000 Russian military advisers which led to a cessation of arms supplies. For some months Sadat had to organise the flow of essential spare parts via Algeria and other third parties. By dint of much effort, he secured Syria's support for his planned assault on Israel and Syria, then convinced the Soviets that *their* interests would be served by another Middle East war and, as a result, the flow of arms to Egypt was resumed.

Within both Egypt and Syria, the populace began to show disquiet at the apparent lack of action by Sadat and Assad; thus the internal pressures grew for both leaders to do something or resign. Once again escalation was gathering momentum.

From January 1973 onwards diplomatic intercourse between the Arabs and the USSR increased to a high level and all students of Middle Eastern politics were thus convinced that another war was coming; the only question was — when?

Israeli intelligence was aware of the level of Arab military readiness but the question of if and when an offensive would be launched was much less easy to answer. By maintaining constant high activity in their Army west of the Suez Canal the Egyptians gradually chilled the reflexes of the Israeli intelligence network's responses. It became accepted that large formations of armour, engineers and infantry were deployed on the west side of the canal for an exercise and would be dispersed again. American satellites also gave plenty of data concerning Egyptian troop movements but the security surrounding these movements remained effective. Thus it was that the Egyptians achieved surprise even though operating in full view of their enemy — 'the best place to hide a tree is in a forest'!

The Yom Kippur War differed from those of 1956 and 1967 inasmuch as it was the Arabs who struck first in 1973 and there was another (and vital) variation — the invincible IDF Air Force was not to be allowed to decide the course of the war within a few hours as had previously happened. Although the Arab Air Forces had no hope of achieving supremacy in combat, the Arab high command had devised a plan to bring about the same aim by different means. By attacking on the ground and seriously threatening the existence of the Israeli Army simultaneously in Sinai and on the Golan heights, the IDF Air Force would be forced into an FGA role to save their own ground forces instead of attacking enemy targets of their own choice. Having lured the Israeli planes into their selected killing zones, it was the Arab tactic to saturate these areas with SAMs to such an extent that even the sophisticated ECM of the Israeli planes would be unable to save them. This tactic of using missiles instead of planes to destroy the Israeli Air Force should also ensure that once the skies were cleared of Jewish planes, the Arab Air Forces could then go into action against the Israeli ground forces and avenge previous defeats. To ensure success of this plan, vast quantities of SAMs were moved into the forward battle zones. Battalions of air defence troops were raised and equipped; SAM 2 and SAM 6 sites multiplied along the canal and in the Golan heights and provided long-range, high-altitude cover whilst in the assaulting formations the man-portable SAM 7 was distributed on a lavish scale to give low level defence against Israeli planes flying under the radar screens of the longer range missiles.

The Arab general staff had thus found the right answer to the air threat and their solution to Israeli tank superiority was along very similar lines. Their own, inferior armour was to be held back initially while the inevitable, deadly Jewish tank thrusts were



Israeli M-109 SP artillery in action on the Golan Heights in 1973 (Christopher F. Foss).

to be countered by swarms of ATGWs, mainly the man-portable Sagger. The wide, flat expanses of the desert east of the Suez Canal were ideal for this tactic, giving full use of the long range and great accuracy of such weapons. Following destruction of the Israeli armour, the Arab tanks (under their own air cover) would be free to wreak havoc among the enemy infantry and logistic units.

Syrian and Egyptian forces attacked Israel at 1400 hours on October 6 1973. The date was chosen as it was one of the most holy Jewish feast days, Yom Kippur (The Day of Atonement), and one on which manning of front line IDF installations would be minimal. Ironically, this lack of normal activity within Israel aided mobilisation as everyone was at home, the roads were clear and civilian transport earmarked for military requisitioning was all in depots and garages available for collection.

The Golan Heights

The opposing orders of battle on this northern front at the outbreak of war were: Syria — three mechanised infantry divisions in the front line, two independent armoured brigades behind them (at Jasim and south of Sheikh Miskin), 1st armoured Division at Kiswe, 3rd Armoured Division around Sabraxi and Sasa, an armoured brigade and a commando brigade at Damascus. Syrian tank strength was over 900 in the forward zone, 500 around Qatana

The Yom Kippur war — comparison of forces available 1973

	Formations	Army manpower	Tanks	Air force manpower	Combat planes	SAM
ISRAEL	11 divisions	270,000	1,700	20,000	500	60
EGYPT	12 divisions	260,000	2,000	23,000	600	650
SYRIA	7 divisions	120,000	1,600	1,600	300	200
IRAQ	3 divisions	30,000	400	400	60	?
JORDAN	6 divisions	62,000	500	6,700	78	?
SAUDI ARABIA	1 brigade	1,500	10?	Nil	Nil	Nil
MOROCCO	1 brigade	1,800	Nil	Nil	Nil	Nil

Navies	Fast Patrol Boats				
	Large	Small	Destroyers	Submarines	Escorts
ISRAEL	2	12	Nil	2	Nil
EGYPT	12	6	5	12	17
SYRIA	2	6	Nil	Nil	2

and Kiswe and 100 in Damascus. The aim of the Syrian attack was to take the Golan heights and all the territory up to the River Jordan. It was supported by 155 batteries of field guns and mortars.

The Israeli forces in the fortifications on the Golan front comprised two infantry battalions and in support were 11 artillery batteries and two armoured brigades, the Barak (deployed along the length of the fortifications) and the 7th (in general reserve in the rear). Tank strength was 180. It will be noted that the Israelis had obstacles at their back — the Jordan and the Sea of Galilee.

The weakest points in the Israeli line were at Quneitra and Rafid and it was here that the major Syrian thrusts came. At about 1400 hours, October 6, the Syrians opened up an artillery bombardment and began air strikes on the Israeli positions. Under cover of this fire Syrian engineers moved forward to clear the mines and wire and to bridge the anti-tank ditches which formed the foremost obstacles. While the 5th and 9th Syrian infantry divisions held down the Golan defenders and cleared the approaches, the 1st and 3rd armoured divisions passed through them to create two breaches. At the same time as the opening of the artillery barrage, Syrian helicopter-borne commandos landed to the rear of the Israeli observation post on Mount Hermon, surprised the garrison of 60 and quickly captured the place.

The Syrian assaults were carried out by massed tank formations with supporting APCs in close attendance; 500 tanks attacked at Quneitra and 800 at Rafid. Despite being surprised and outnumbered, the Israeli garrison on the Golan line inflicted heavy losses on the massed armour formations, it being difficult to miss such excellent targets. Shortly, however, the Syrians were in Quneitra and, around Rafid, they broke through the defensive belt and pushed on south-west towards Fiq.

The Israelis reacted by both calling up reinforcements and trying to hold the line with their existing troops. The 7th armoured brigade was concentrated against the Quneitra thrust and northwards; the Barak armoured brigade took the south. Here, as on the Suez front, the IDF Air Force was thrown into the battle in an FGA role and suffered considerable losses from the massed Syrian SAMs.

In the armoured battles on the Israeli line tank fought tank at ranges as short as 200 metres and this, coupled with overwhelming Syrian numbers, outweighed the traditional supremacy enjoyed by the Jewish tankers with their more sophisticated weapons systems. By 1900 hours on October 6 the Barak armoured brigade had been smashed and the Syrian armour began to roll forward, to be confronted by the first of the mobilised Israeli reserve units which were thrown into the desperate struggle piecemeal as they arrived.

At the Quneitra break-in point the Syrians were unable to achieve the forward penetration towards the Jordan that they desired and thus set their infantry the task of rolling up the Israeli line north and south of the gap torn in the Golan defences. Heavy fighting resulted in which Syrian casualties were high.

During the morning of October 7 another Israeli reserve brigade arrived in the 7th armoured brigade sector and took over the southern part of the front there, being used to counter a Syrian thrust on Kafr Nafah, Ein Zivan and Kafr Dalhamiya. Meanwhile the remnants of Barak brigade were being forced back on Nafah via the Gamla pass and the brigade commander was killed in the action to stop the Syrians seizing the vital Bridge of the Daughters of Jacob (B'not Yaakov) over the Jordan.

By this time three of the Israeli southern Golan strongholds had been evacuated and Syrian tanks were only seven kilometres from the Sea of Galilee on the Gamla road (they actually got to within two kilometres of the lake). However, Israeli reserve units now began to arrive in strength, the front was divided into two divisional areas (Major General Laner in the south, Major General Eitan in the north) and the forward Syrian elements were stopped and repulsed. Major General Peled's armoured division arrived late on October 7 and began to prepare the Israeli counter-offensive and another armoured division was deployed south of the Sea of Galilee to check any possible interference from Jordan.

Peled's counter-attack went in early on October 8 on two main axes: the major thrust by Ein Gev and Al Juhadar and a secondary thrust through the Gamla pass. An unsuccessful attempt was also made that day to recapture the lost Mount Hermon position. The Israeli counter-attack in southern Golan made slow but sure progress (the IDF Air Force had now got the upper hand as Syrian SAM fire slackened due to exhaustion of supplies) and the momentum had gone out of the Syrian ground forces after three days of heavy fighting. By the evening of October 8 Peled's division was almost at Petroleum Road and 24 hours later it was south of the Rafid-Hushnieh road and in control of it between Tel Zohar and Kushniya (the latter having been taken and lost again during the day).

On October 10 Kushniya was retaken by the Israelis and the last Syrian thrust at Quneitra was repelled by the 7th Brigade. Peled's division now reached the 1967 cease-fire line but could make no further progress. The Syrians evacuated Quneitra and Laner's division prepared to take the offensive into Syrian held territory the next day.

The Israeli counter offensive, October 11-13

Since 1967 the Syrians had built a comprehensive fortification belt, varying in depth from seven to 15 kilometres, north of Sasa and stretching between two obstacles — Mount Hermon in the north and the Roked canyon in the south. The fortifications contained strongpoints sited in depth with mutually supporting fields of fire, anti-tank ditches, minefields and barbed wire entanglements. It was, however, only partially manned since the Syrian units falling back into it had suffered heavy losses in the Golan fighting.

Eitan's division (7th armoured and Golani infantry brigades) was to head the Israeli assault on two axes: Mazrat Beit Jaan in the north and Jubata el Hashab-Tel Shams in the south. Laner's division was to exploit Eitan's break-in.

On October 11 Eitan's northern thrust pierced the Syrian minefield, advanced over the rocky terrain and seized the Hadar-Teranjeh and the Tel Ahmad cross-roads and moved up towards Mazrat Beit Jaan. The southern column penetrated the minefields and took Halas village.

October 12 saw the capture of Mazrat Beit Jaan but the southern thrust ran into heavy opposition on the Quneitra-Sasa road three kilometres short of Tel Shams and had to withdraw. Tel Shams was captured in the night of October 13-14 by an Israeli paratroop battalion.

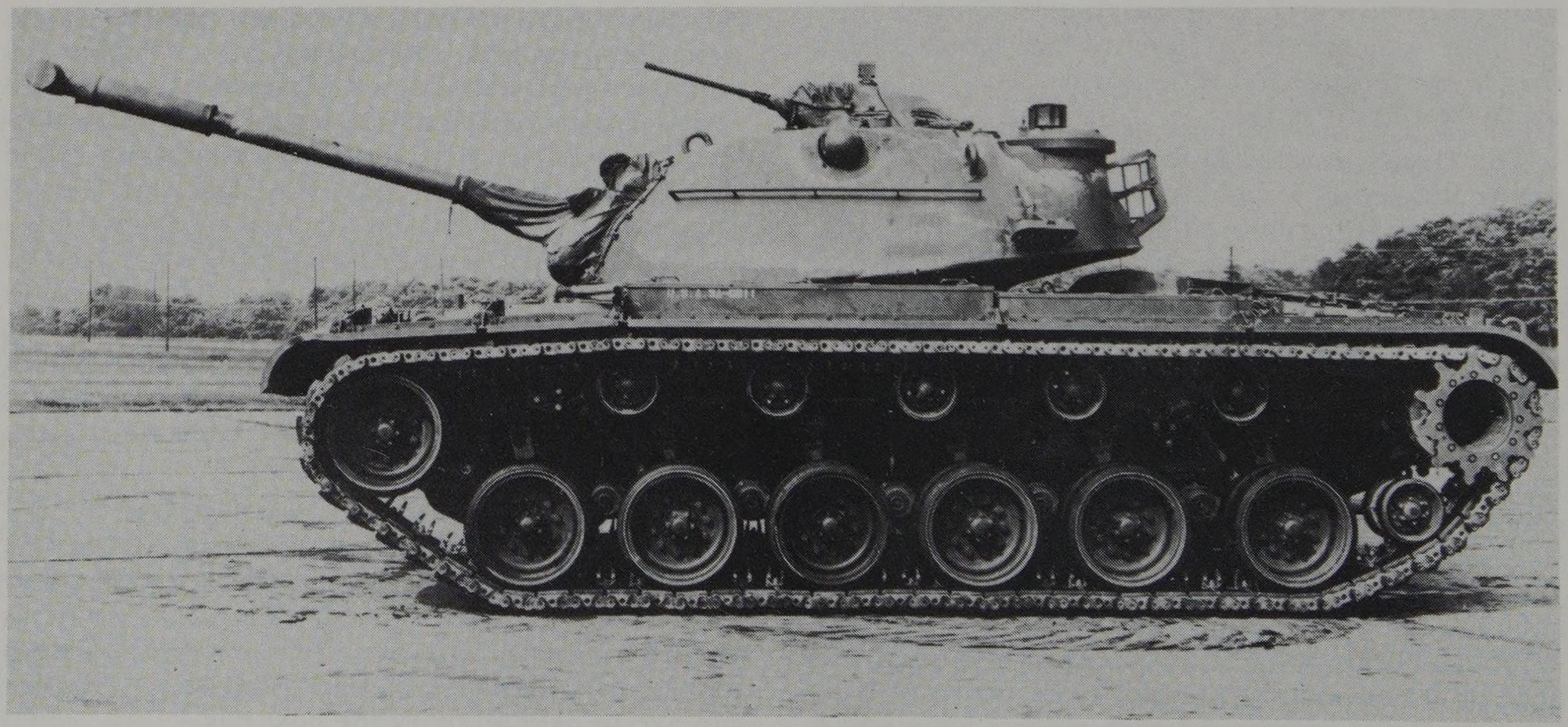
Laner's division now joined in the attack and on October 11 captured Tel Kurnam and reached the Matz cross-roads after heavy fighting. On October 12 they took the Nasaj cross-roads and were pushing on towards Kanakir when two Iraqi mechanised infantry brigades appeared on their right flank and caused the movement to be abandoned. Laner redeployed his division to meet this new threat and at dawn on October 13 the Iraqis blundered into his trap and suffered very heavy losses. They had, however, taken pressure off the Syrian positions and the Israelis made no further progress on this front. The positions they finally held were: in the north the Hermon slopes to Mazrat Beit Jaan, the Matz cross-roads and the Sasa-Quneitra road; in the south from the Matz cross-roads to Tel Mashara, Tel Antar and Tel M'rai. On October 17 Peled's division took over the positions held by Laner's.

From October 13-24 various counter-attacks were launched by the Syrians, Iraqis, Jordanians and Saudi Arabians but the battle lines remained static except that the Israelis took Um Butne on the night of October 18-19 and Golani brigade units recaptured the Israeli Hermon position while paratroops took the Moroccan-held Hermon position and the peak of the mountain in night attacks on October 21-22.

The fighting was over on the Golan front and the Israelis were the winners. Combined Arab losses were (according to Israeli sources) 3,500 dead, 5,600 wounded, 400 prisoners; over 1,000 tanks damaged or destroyed, 140 aircraft shot down and hundreds of APCs and artillery pieces damaged or captured.

The Suez front

The Egyptian attack began at 1400 hours on October 6 and involved five infantry, two mechanised and two armoured divisions plus supporting artillery, engineers and other Army formations. There were 1,700 tanks (the Egyptians had a total of 2,200 at this

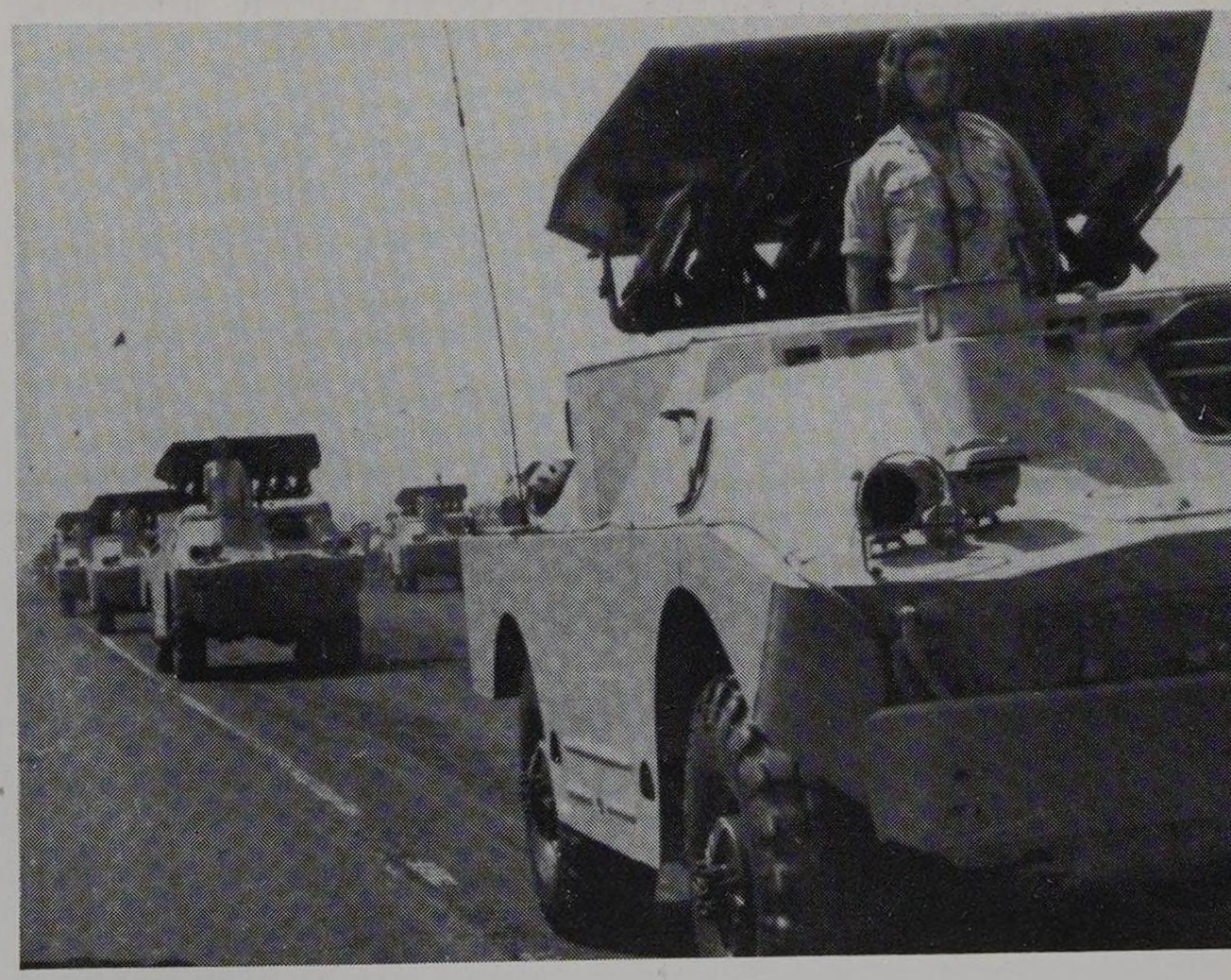


point), 2,000 guns, over 600 anti-tank missile systems and 50 SAM batteries. One Israeli observer in the Bar Lev Line reported that during the first day's assault, practically every Egyptian infantryman who crossed the canal carried a man-portable weapon system, either the Sagger ATGW or the SAM 7. In the Bar Lev Line only light forces were present in the observation posts (20 were unmanned and four only partially manned) at the time of the attack. The garrison was 450 soldiers. Each of the strongpoints in the line was named.

To the rear of the Bar Lev Line ran Artillery Road — lateral communications — and along this were deployed 90 Israeli M-48 Patton tanks from the armoured brigade the balance of which (200 tanks) were concentrated at Refidim and Bir Thamada in deep support. Major General Mendler commanded this division. In the south of the Sinai peninsula was a third Israeli brigade and at Sharm el-Sheikh (called Solomon District by the Israelis) were other Army, Navy and Air Force units.

The Egyptians had prepared their assault on the canal with great care. They knew that the Israelis had built oil pipelines into the east bank so that in the event of an attack, the surface of the canal could be turned into a blazing inferno and, during the night of October 5-6, they sent frogmen and commandos over the canal to plant explosives in preparation for the assault and to plug the oil pipes. These raids went undetected by the Israelis.

Left *US M-48 tank. The IDF have used these tanks (in modified form) with success against the Soviet T-54/-55/-62s* (Christopher F. Foss). **Above** *A marriage of convenience. The 90 mm towed anti-tank gun has been removed from its carriage (to be seen in the rear) and mounted in the M-3 half-track to make an effective tank destroyer* (AP). **Below** *Egyptian-manned, Soviet-built BRDM amphibious scout cars with the Sagger ATGWs which took such a heavy toll of Israeli tanks in Sinai in 1973. Note the infra red vehicle lighting and the breakwater splashboard which is folded down under the vehicle's bows* (Christopher F. Foss).



The Egyptian Army crossed the Suez Canal at three points using a mechanised infantry division at each (south of Qantara, north of Ismailia and south of the Bitter Lakes). The operation was to be in three phases: phase 1, establishing bridgeheads; phase 2, seizure of the Khatmia, Jiddi and Mitla passes; phase 3, clearance of the rest of Sinai.

Two armoured divisions were to move into the bridgeheads created by their infantry counterparts and then to achieve the second and third phases of the operation.

Coinciding with the canal assaults, Egyptian commandos in helicopters raided Israeli rear areas in northern Sinai, the oil fields at Abu Rudeis and Sharm el-Sheikh in the south. These raids had only limited success.

The Bar Lev defences in the northern sector were all overrun within a few hours and the rest were surrounded and cut off although some held out for a week and the Israelis managed to take off one or two strongpoint garrisons. Powerful water cannon, mounted on pontoons, were then launched into the canal and their jets rapidly tore gaps in the opposing sand banks to make exit points for the PT-76s which were the first Egyptian tanks across. During the first day Egyptian engineers constructed 50 pontoon ferries which were then converted into ten bridges as soon as possible over the 70-metre-wide canal. Infantry poured across all the while, carrying their ATGWs and SAMs and pushing forward the dense Egyptian anti-aircraft screen.

Israeli artillery engaged the bridging areas but was subject to strong counter-bombardment itself and when the Israeli Air Force attacked the crossings it incurred heavy losses from SAMs 2, 3 and 6, although the SAM 7 proved to be too slow and too limited in explosive power to bring down all the low-flying planes it hit. The Soviet ZSU-23-4s were, however, very effective against low-flying planes.

Within 24 hours the Egyptians had moved over 500 tanks into the three bridgeheads which were now about three kilometres deep and were to extend eventually to seven. The Israelis were unable to prevent the crossings or hinder them greatly and when their reserve armour raced forward alone to crush the Egyptian tanks in the accustomed style, they ran straight into the extremely dense ATGW screen. The dispersed Egyptian infantry, hugging the ground and using their Sagger missiles, gave the Israeli tankers no worthwhile targets and as the Israelis had no accompanying artillery or infantry to clear the Egyptians they sustained crippling tank losses while their foes remained unscathed. Thus the IDF Army staff paid dearly for ignoring the well-proven rule that any task force in modern war must contain components of all arms (air, armour, infantry, engineers and artillery). Another Israeli tank battalion was destroyed on October 9 in similar circumstances near Qantara and this tragedy was repeated again later. During October 6 the Israelis lost over 50 per cent of their total tank casualties in Sinai in this campaign.

Generally the canal crossing in the north (Egyptian 2nd Army) had gone well but in the south (3rd Army) there were delays in breaching the sand banks and in building the bridges; for this reason tanks did not appear in the bridgeheads of the 3rd Army until the early morning of October 7.

During this day, two Israeli divisions under Major Generals Adan and Sharon arrived in Sinai and that of Adan took over the northern canal front; Sharon's the centre while Mendler's moved to the southern sector. At 1000 hours on October 7 the order was given to evacuate the 20 strongholds in the Bar Lev that were manned: the garrisons of Ketuba, Drora, Purkan, Botzer and Lakekan succeeded in reaching their own lines; Budapest (on the Mediterranean coast) remained manned until the cease-fire; the garrisons of Orkal, Lahtzanit, Milano and Mifreket were mostly captured attempting to withdraw and Lituf, Hizayon, Matzmed (in the north and centre), Mefatzeah, Pier, Nissan and Masrek (in the south) were overrun.

By the morning of October 8 the Egyptians had 600 tanks on the east bank and were busy consolidating their bridgeheads under the missile umbrella. The Israelis rightly decided to counter-attack as soon as possible and Adan's division was to assault the 2nd Army with Sharon's ready in the rear to aid him or to attack the 3rd Army, depending on how the battle went. Adan's attack began at 0800 hours on October 8 and made good progress initially. Sharon's division moved off to attack the 3rd Army, but then Adan's armour ran into very heavy anti-tank fire from both canal banks in the Firdan sector and was forced to withdraw. That afternoon the Egyptians launched a combined tank and APC counter-attack on Adan's division and were making good headway, so Sharon's division had to abandon its own assault and wheel north to take the Egyptians in the flank and save Adan's hard pressed division. By the end of the day the Egyptian thrust had been repelled but they now controlled bridgeheads eight kilometres deep along the canal, except in the centre (on the east side of the Great Bitter Lake) where a dangerous gap had been left.

Due to its unexpected lack of success in Sinai, and to the seriousness of the Syrian thrusts from the Golan heights, the IDF staff now decided to order the Army merely to hold on the Suez Canal and to transfer reserves to the north to defeat the greater danger there. From October 9-13 there followed the struggle in Sinai to contain the Egyptian expansion until

Israeli forces could be rushed south from the Golan heights.

Between October 11 and 13 the Egyptians transferred 500 more tanks to the east bank area of the 3rd Army but lost almost 200 in successful offensives to gain control of Artillery Road behind the Bar Lev Line.

Major General Mendler was killed on October 13 and was replaced by Brigadier Magen.

On October 9 an IDF reconnaissance unit reached the eastern shore of the Great Bitter Lake and reported it free of the enemy. The Egyptian 2nd Army launched a major armoured assault north of the Great Bitter Lake on October 14 and ventured outside their SAM protection for the first time in a further effort to secure the Khatmia, Mitla and Jiddi passes. In a fierce battle they were repulsed with heavy losses and another attack the next day fared no better. After this they returned to the west bank many SAM batteries which they had brought across on October 12-13.

During the night of October 13-14 a force of 100 Egyptian commandos had been lifted by helicopter to seize the cross-roads at Tasa behind the Israeli lines but they were destroyed during the morning of October 14. Tank losses in the battles of October 14 (according to IDF sources) were 200 Egyptian to 20 Israeli.

By now the Golan front had stabilised in favour of the Israelis and at once forces were rushed south so that a counter-stroke in true IDF style could be launched at the Egyptians who had lost the initiative in Sinai.

It was decided by the IDF on October 9 to send a reconnaissance force over the Great Bitter Lake using captured amphibious PT-76s and this raid had established that the western side of the lake was unoccupied by the Egyptians. The Israelis then knew that an opportunity existed to strike between the enemy 2nd and 3rd Armies and to attack the numerous missile sites on that bank which, as yet, had been untouched by the Israeli Air Force. Breaching this umbrella from the ground would expose the Egyptians on the east bank and increase the opportunity of success. It would also place forces in a position to cut the lines of communication of both enemy Armies and to threaten Cairo and Suez.

The Israeli attack began at 1700 hours on October 15 and was led by Sharon's division in the area north of Duwer Soer. Three tank brigades were involved. Paratroops crossed the canal in assault boats and seized a bridgehead which by next morning was over three square kilometres in area.

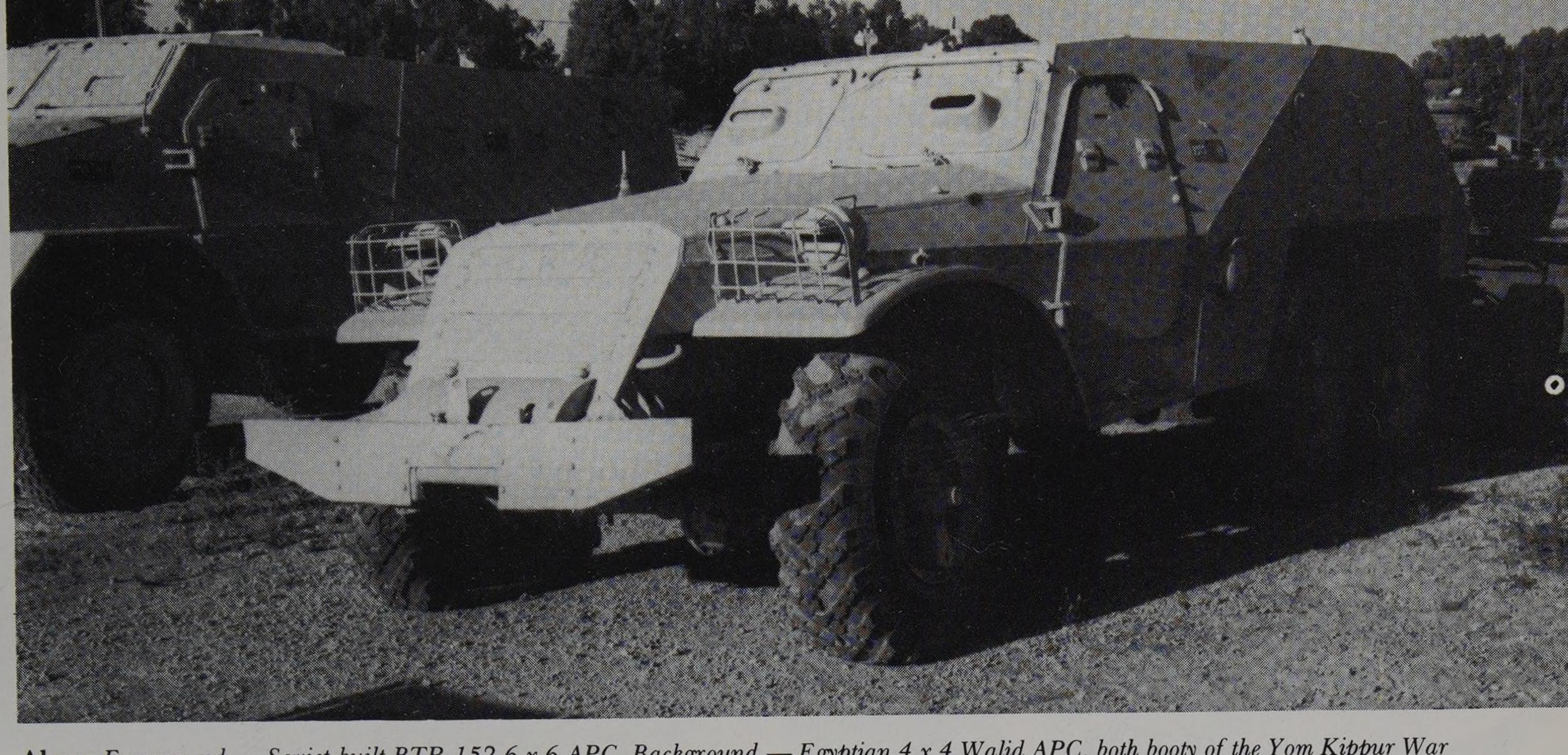
As soon as the Egyptians learnt of this move they directed both Armies to cut it off by convergent attacks in the night of October 15 and these attacks led to the Battle of Chinese Farm which, together with technical difficulties over the transport of Israeli bridging equipment, led to delays in the placing of a bridge across the canal at the bridgehead site. During October 16, however, a company of Israeli tanks and one of APCs crossed the canal and began attacking SAM sites, thus ensuring their own air support. As most Egyptian forces were now on the east of the canal, there were only light forces available to oppose these Israeli raiders.

On October 16 Adan's division joined Sharon's in the crossing and brought up more pontoons. That night it was reinforced by a paratroop brigade and, by 1630 hours on October 17, a pontoon bridge had been set up and a tank brigade transferred. Adan's division also destroyed the Egyptian 25th Armoured Brigade when it attacked north from the 3rd Army

An Israeli half-track in Sinai 1973. From the 4th Battalion of a regiment (Christopher F. Foss).



Above left *A T-55 in Egyptian Army service. Note the infra red searchlight for night fighting* (Christopher F. Foss). **Above right** *A captured Soviet T-54 of the Egyptian Army* (Christopher F. Foss). **Below** *A T-54 in Israeli service — here in the 3rd Battalion of a tank regiment. The white chevron indicates battalion; point at 12 o'clock is 1st Battalion. point at 9 o'clock is 2nd Battalion, at 6 o'clock is 3rd Battalion and at 3 o'clock is 4th Battalion* (Israeli Army).



Above *Foreground — Soviet-built BTR-152 6 x 6 APC. Background — Egyptian 4 x 4 Walid APC, both booty of the Yom Kippur War* (Irvine Cohen).

area on the east bank. That night the division moved over to the west bank through Sharon's division which was holding the bridgehead. On October 18 Sharon took Chinese Farm and threw another bridge over the canal while paratroopers advanced to Serapheum on the west bank and were held up by growing Egyptian resistance. Magen's division now also began to move to the west bank. From October 19 up to the first cease-fire (1952 hours October 22) the Israelis poured over the canal; Sharon's division pushed north on Ismailia, Adan's and Magen's south on Suez. On the east bank remained only Brigadier Sassoon's division facing the 2nd Army, a brigade of Sharon's division in the Chinese Farm area, and 'Granite Force' from Magen's division (plus other units) facing the 3rd Army.

During the 19th the main Israeli pressure was still on towards Suez and the Israeli Air Force pounded the 3rd Army on the east bank. On October 20 an Israeli paratroop unit captured Fayid airport and by next day the Cairo - Suez road was blocked by the IDF while Sharon's division was almost at the outskirts of Ismailia and the approaches to the Hanfisha bridge.

The first cease-fire broke down on October 23 (the Israelis wanted to complete the encirclement of the 3rd Army and thus have a hostage in the subsequent political negotiations) and so Adan's and Magen's divisions pushed on towards Suez and the Red Sea. In the evening of October 23 they captured Ras Adabiyeh and reached Shelufa airfield. Growing Egyptian resistance in Suez itself stopped the Israelis at the outskirts of the town but the 3rd Army had now been completely surrounded.

By now the USA and USSR were fighting a political battle for their proteges but crisis was averted and it was agreed that a UN force (excluding representation from the super powers) would be inserted between the enemies after a near cease-fire had been called (which it was at 0700 hours on October 25) and the opposing forces had withdrawn to positions to be agreed in subsequent negotiations.

Summary

Although surprised in this war, the Israelis had responded with alacrity, ingenuity and determination and had retrieved serious situations on both fronts. Spoiled by previous successes, they had chosen to ignore the proven principles of warfare and to underestimate the enemy. They paid heavily for these mistakes.

The Egyptians had improved greatly since 1967 and their successes in the early stages of this war made them justly proud. They still lacked the ability to excel at mobile armoured warfare and their Air Force was no match for the Israelis. Their commanders and staffs appeared still unable to react swiftly and decisively enough in a crisis but their performance in that war was a great improvement on previous showings. The limiting effects imposed on manoeuvreability by the Suez Canal on the Egyptian Army have many parallels in history.

The Syrians fought extremely well in the Golan but their poor tank tactics and inferior equipment still limited their achievements.

Participation of Arab allies was, as usual, mixed.

Background photograph *An Egyptian SAM 2 site captured on the west bank of the Suez Canal, October 1973* (IDF spokesman). **Inset above right** *Captured Syrian T-55 tanks being removed by Israeli tank transporters* (IDF spokesman). **Inset below right** *Soviet-made tracked logistic vehicles captured on the Golan Heights in 1973* (IDF spokesman).







A park of captured Syrian equipment after the Yom Kippur War — mostly T-62s (IDF spokesman).

Jordan seems not to have agreed to join in the common assault on October 6 and only became active later; Iraqi forces were negligent in their tactical movements and suffered heavily; Morocco gave an infantry brigade which was in action on Mount Hermon on October 6 and acquitted itself well and the Saudi Arabians were also active on the Jordan side of the Golan heights.

Both sides used vast amounts of ammunition, tanks and planes and soon had to be supplied by their super power patrons or the contest would have ground to a halt very quickly.

Estimated casualties

	Killed	Wounded	Captured and missing	Tanks	Fighters	Ships
ISRAEL	2,812	7,500	531	840	120	Nil
EGYPT	12,000	30,000	9,000	650	182	4
SYRIA	7,000	21,000	?	600	165	7
IRAQ	125	260	18	80	21	Nil

This information is reproduced from the *Pakistan Army Journal,* December 1975. The figures quoted differ from those found in Western sources; perhaps the author (Brigadier S. A. El-Edroos (retd.) Pakistan Army) had access to more detailed information. All the data refer to the period of the Yom Kippur War, 1973.

Comparative strength of defence forces of Arab confrontation states and Israel 1973

	Egypt	Syria	Jordan	Lebanon	Israel	
GNP	$8.4 billion	$2.5 billion	$0.8 billion	$2.9 billion	$8.7 billion	
Defence Budget	$3.120 billion	$0.9 billion (?)	$90 million	$133 million	$3.688 billion	
Total Armed Forces	323,000	137,000	74,850	15,250	400,000	
					Regulars	33,500
					Conscripts	112,500
					Reservists	254,000
Army	280,000	125,000	58,000	14,000	Army	375,000
					Air Force	20,000
					Navy	5,000
Armoured Divisions	3	2	2	1 × Armd Bde	*Armoured Brigades*	10
Mechanised Infantry Divisions	4	4	1		*Mechanised Brigades*	9

	Egypt	Syria	Jordan	Lebanon	Israel	
Infantry Divisions	5		2	9 × Inf Bns	*Infantry Brigades*	9
Parachute	1 × Para Bde	3 Bns			*Para Brigades*	5
Brigades	2 × Airborne Bdes					
Commando/SSG	26 Bns	5 Bns	2 × Special Force Bns	1 × Cdo Bn	Nahal/Border Guards	9,000
Para-Military Forces						
Tank/AFV	(2,000 Hy, Med, Lt)	1,600 (Tks)	500 Tks	120 Tks	1,900 (Tanks)	
Strength	2,000 (Armd Vehs)	1,400 (APCs)	400 APCs/ Armd Cars	145 APC/ Armd Car	3,600 (AFVs) 2,500 (APCs)	
Tactical SSM/SAM/ATGW						
	SSM	**SSM**	**SSM**		**SSM**	
Frog 7 – Unguided Rocket – Range 45 miles	2 × SSM Regts – 24 Scud	24 SAM Btys – SA2, SA3	Nil	Nil	Md-660 (Jericho) – range 280 miles	
	18 × Frog 7 – Samlet (Naval SSM)	14 SAM Btys SA6 Frog Scud 'B'			(Nuclear warhead) Lance (US) – 66 miles Gabriel (Naval SSM) – 13 miles	
	ATGW	**ATGW**	**ATGW**		**ATGW**	
Scud 'B' – SSM Missile-Nuclear Warhead: Range 185 miles	Snapper (2,000 metres) Swatter Sagger (3,000 metres)	Snapper Swatter Sagger	TOW (3,000 metres)		Dragon (1,500 metres) Cobra (2,000 metres) TOW (3,000 metres) SS 10/11	
Air Force						
Personnel	28,000	10,000	4,600	1,000	20,000	
Combat Aircraft	**568**	**300**	**50**	**18**	**466**	
	18 × Tu 16 (Medium Bombers)	200 × MiG 21	36 × F 5	8 × Hunter	10 × Vautour (Light-bombers)	
	25 × Il 28 (Light Bombers)	80 × MiG 15/17	14 × F104	6 × Mirage III	150 × F4E/F (Phantoms) (Fighter-Bomber/Interceptor)	
	200 × MiG 21 (Interceptors)	30 × Su 7			180 × A4E/H (Sky-Hawks) (Fighter-Bomber)	
	100 × MiG 17	14 × Transport			25 × Mirage III B/C (Fighter-Bomber/Interceptor)	
	100 × Su 7 (Fighter-Bombers)	14 × Helicopters			27 × Mystere IV, 30 × Ouragan } Fighter-Bombers	
	40 × Mirage III (Fighter-Bombers)				6 × RF-43 (Recce Aircraft)	
	50 × Yak				85 × Magister (Training)	
	60 × Medium Transport Aircraft				10 × Strato-Cruisers 15 × Noratlas 10 × C47, 4 × C46 } Transport	
	40 × Helicopters				65 × Helicopters	
Air Defence System						
Moscow Air Defence System (?)	SAMs 2, 3, 4 & 6 80 × SAM 2 65 × SAM 3	SAMs 2, 3, 4 & 6	Nil	Nil	a. Nadge/Florida (US) Air Defence Command System b. CIWS (US): Close-in-Weapon System: Vulcan/Phalanx c. Chaparral (US): Surface-to-Air Missile System d. Vulcan (US): Radar-guided AA System e. 10 × SAM Btys – 60 Hawk	
	AA Guns 20, 23, 37, 57, 85, 100 mm	AA Guns 20, 23, 37, 57, 85, 100 mm				
	MiG 21 J – 9 Squadrons (Interceptors)	MiG 21 J/MiG 23				

	Egypt	Syria	Jordan	Lebanon	Israel
Anti-Ballistic Missile System (?)	Galosh – Range 180 miles Griffin – Range 150 miles (SA 5)	Galosh Griffin			Hardsite (US): ABM System ABMM Spartan – 450 miles Sprint – 20 miles
Navy	Personnel (15,000) 2 × Submarines (Soviet W and R Class) 5 × (Skory) Destroyers 2 × Corvettes 12 × (SOI Submarine-chasers) 8 × Osa, 6 × Komar (FPBs with Styx (SSM)) 29 × (Shershen) MTBs 12 × Mine-Sweepers	(2,500) 2 × Mine-Sweepers 2 × Patrol Boats 6 × Komar FPB (Styx) 2 × MTBs	(250) 8 × Patrol Craft	(250)	Navy (5,000) 5 × Submarines 13 × Patrol Boats (Gabriel-SSM) 9 × Motor Torpedo Boats 8 × Patrol Boats 10 × LST 500 Commandos

The Armed Forces of the Unified Arab Command and of Israel

Country	Armed Forces	Armd Divs	Mech Divs	Inft Divs	Parachute/ Commando	Tanks Armoured Personnel Carriers	Combat Aircraft	Surface-to-Surface Missiles/SAM	Reserves
Egypt	323,000	3	4	5	2 × Air-borne Bdes 1 × Para Bde 26 × Cdo Bns	2,000 2,000	568	2 × SSM Regts – 24 × Scud 'B' 8 × Frog 7 Samlet (Naval SSM)	534,000
Syria	137,500	2 1 × Armd Bde	3 3 × Mech Bde	—	5 × Cdo 3 × Para	1,600 1,400	300	24 × SAM Btys – SA 2, SA3 4 × SAM Btys – SA 6 Frog 7/Scud 'B'	200,000
Jordan	74,850	2	1	2	2 × Special Forces Bns	500 400	50		20,000
Total Confrontation States	535,350	7 23 Divisions	9	7	—	4,100 3,800	920		
Iraq	112,500	2	1 × Mech Bde	3	2 × Special Forces Bdes	1,400 1,300	218	Frog 7	250,000
Saudi Arabia	43,000	1 × Bn		4 × Bdes	1 × Para Bn	110	90	10 SAM Btys – Hawk	
Lebanon	15,250	1 × Bde		9 × Bns	1 × Cdo Bn	120 145	18		
Algeria	63,000	1 × Bde 3 × Bns	4 × Bdes	50 × Bns	1 × Para Bn	450 350	206		50,000
Morocco	50,000	3 × Bns	9 × Bns	1 × Bde	1 × Para Bde	249 435	60		
Sudan	43,600	2 × Bdes		7 × Bdes	1 × Para Bde	150 210	51		
Kuwait	10,200	1 × Bde	2 × Bdes			100	28		
Libya	32,000	1 × Bde	2 × Bdes		1 × Cdo Bn	270	70		
Tunisia	24,000	1 × Bn		5 × Bns	1 × Cdo Bn	50	12		
Oman	9,700	1 × Sqn		4 × Bns			12		
North Yemen	26,900	2 × Bns		6 × Bdes	1 × Para Bde 1 × Cdo Bde	60	28		
South Yemen	14,000	1 × Bn		6 × Bdes		50	39		

Country	Armed Forces	Armd Divs	Mech Divs	Inft Divs	Parachute/ Commando	Tanks Armoured Personnel Carriers	Combat Aircraft	Surface-to-Surface Missiles/SAM	Reserves
Bahrain/Qatar UAE	15,000					150 (Armd Cars)	25		
Grand Total	1,000,000	13 Divs	12 Divs	23 Divs		7,200 (Tks)	1,720		1,000,000
		48 Divisions							
Israel	400,000	10 × Bdes	9 × Bdes	9 × Bdes	5 × Para Bdes	1,900 6,100	466	MD 660 (Jericho) SSM (280 miles) 10 × SAM Btys – 60 Hawk, Lance, SSM	

Unified Arab Command — Estimated operational availability of forces: Egyptian and Syrian Fronts

Egyptian Front

Formations	Armoured	Mechanised Infantry	Infantry	Air	Air Defence System
Morocco	Nil	One Bde	–	Sqn – F5 Sqn – C17 (Tpt)	
Algeria	One Bde	One Bde	1 to 2 Divs	Sqn – Il 28, Sqn – MiG 21, Two Sqns MiG 17	
Libya	One Bde	One Bde	–	Sqn – Mirage III, Sqn – Mirage V	3 × SAM Regts – Crotale
Sudan	One Bde	–	One Bde	Sqn MiG 21	
Tunisia	–	–	One Bde	–	
Egypt	3 Divs	4 Divs	5 Divs	–	
Grand Total:	4 Divs	5 Divs	7 to 8 Divs		
		16 to 17 Divs			

Syrian Front (Syria, Jordan and Lebanon)

Iraq	One Div	–	One Div	Sqn – Hunter: Two Sqns – MiG 21: Sqn SU 7	SAM 2, 3 & 6
Saudi Arabia	–	–	One Bde	Three Sqns – F5: Sqn Mirage III	4 × SAM Btys – Hawk
Kuwait Muscat, Oman, UAE, North Yemen South Yemen Bahrain, Qatar	One Bde	One Bde	–	Sqn – F5: Sqn Mirage III Sqn – MiG 17: Sqn Hunter	
	One Bde	–	Two Bdes		
Syria	2 Divs	3 Divs	–	–	
Jordan	2 Divs	1 Div	2 Divs	–	
Lebanon	–	–	1 Div	–	
Grand Total:	5¾ Divs	4½ Divs	5 Divs		
		15 Divs			

Summary

Egyptian Front	4 Divs	5 Divs	8 Divs	Mirage III – Two Sqns, MiG 21 – Two Sqns, MiG 17 Two Sqns, F5 – One Sqn, C47 – One Sqn = 8 Sqns
Syrian Front	6 Divs	4 Divs	5 Divs	Mirage III – Two Sqns, MiG 21 – Two Sqns, MiG 17 One Sqn, F5 – Four Sqns, Hunter – Two Sqns = 11 Sqns
				19 Sqns
Grand Total: (Unified Arab Command)	10 Divs	9 Divs	13 Divs	
		32 Divs		



Israeli SP artillery (M-110) in the post-1973 victory parade (Christopher F. Foss).

Military developments since 1973

Israel

Having been caught unawares for the first time, and having seriously underestimated their enemies' ability (particularly that of Egypt) the Israelis have taken extensive action to rectify their shortcomings.

Defence spending was already at a very high level in the country but the Yom Kippur War showed that even those vast sums had not bought immunity from surprise and the possibility of destruction.

The problem is that while Israel's potential for military expansion is strictly limited by geography, population and finance, that of her Arab enemies is governed almost solely by the will of their respective governments.

Improvements have been introduced in the following fields:

Intelligence: The network has been expanded and intensified. This alone will not guard against future surprises as it is the evaluation and interpretation of collated data that really counts. Gathering in more (and perhaps spurious or intentionally misleading) data can only make the processing more difficult and time-consuming.

Standing armed forces: Establishments of existing units have been increased, as has the number of units maintained in readiness. The Israelis admit to an increase of 35 per cent but many foreign observers would put the true figure much higher.

Reserve units have been similarly expanded and the conscription quotas have been raised. To achieve this, the high military service acceptance standards have been lowered and age limits extended. It remains to be seen how this new influx of lower quality recruits will affect the combat value of the IDF. Tank forces have been increased from 2,500 to 3,000 and the quality of these tanks has been improved by better sighting equipment, night vision appliances and more effective armour-piercing ammunition. Israel is reported to have started producing its own tank in 1978 — the Merkava (Chariot) in which emphasis is placed on survival ability and crew safety.

To replace the World War 2 American half-tracks the IDF have acquired 3,000 APCs and self-propelled heavy artillery has been tripled in quantity since 1973, mainly using the US M-107 and M-110 equipment. Combat planes stand now (May 1978) at 550 with the USA supplying 35 F-15s and 75 F-16s. Israel now produces her own combat planes capable of Mach 2 and Mach 3 performance (the Kfir — a union of the Mirage airframe and an American power pack).

The Navy received three British-built submarines in 1977 and more missile and patrol boats are being constructed in the naval yards at Haifa. Much ammunition is home-produced and the Israeli defence industries now employ over 30,000 people with annual exports standing at almost $400 million.

The Arabs

Since 1973 Egypt has broken with the USSR and is now seeking to replace Russian military hardware and acquire expert advice from western sources. British mechanics have serviced and repaired T-62s and the government-sponsored Defence Sales organisation has sold ATGWs (Vigilant), SAMs (Rapier, Blowpipe) and various engineering, bridging and mine-laying equipment.

The changeover in such a wide range of combat hardware is bound to affect adversely the fighting potential and the logistic capability of the Egyptian Army for some years to come. Having been caught off balance this way before (1956), it would seem that Egypt will be interested in a period of peace until the homogeneity of its equipment and doctrine has been restored. The quality of Egyptian tank force performance is regarded as being higher now than in 1973 and, as the hardware is unchanged, the improvement must lie in crew performance, tactics, command and staff work. A surprising development

has occurred in that America — once a hard-line supporter of Israel alone — has agreed to sell Egypt 50 F-5s and Saudi Arabia 60 F-15s.

Arab naval strengths have remained roughly static and while their missile boats remain equipped with Styx SSMs, it seems likely that their chances of success in encounters with IDF FPBs using the more accurate Gabriel SSM will remain slim.

The Egyptian air defence system is still equipped with Soviet SAMs and, since severance of aid from the USSR, may be regarded as less effective than it was. Missile resupply and maintenance problems will mean that the massed salvo technique of 1973 will not be possible at that intensity and duration.

The Syrian Army also suffered heavy losses on the Golan heights in 1973 and their tactics showed a lack of imagination and a standard of training which could be improved. Most hardware losses have been replaced now by the Russians, and the Syrian armed forces are not faced with the same problems of interrupted supply and confused logistics which beset the Egyptians.

Both the Egyptian and Syrian forces had their moments of success in 1973 and morale has been considerably improved as a result.

Many other Arab states are now buying sophisticated tanks, planes, SAMs, ATGWs and other equipment from Western suppliers. It must be expected that their combat readiness will improve once their training staff have been able to get the Armies to digest the new operating procedures and tactics dictated by these weapons systems.

The Egyptian Air Force's planes are reportedly almost all grounded for lack of maintenance and in December 1977 Rolls-Royce gained a contract to overhaul the MiG-21 fighters. This military weakness in Egypt has doubtless caused the Israelis to be less accommodating politically than they otherwise might have. The UK is also now agreeing to supply Egypt with SAMs and Swingfire ATGWs.

A few words must now be said about the relative qualities of the tanks used in these conflicts. The Arab states mainly used Soviet tanks and the Israelis initially used only tanks of western manufacture. In each of the wars the superiority of the Israeli tanks has been convincingly proved and it merits investigation.

The Russian T-55 and T-62 enjoy the best ballistic shape of any tanks available, with a low silhouette and no projectile traps such as those caused by turret rear overhangs. This, however, leads to very cramped internal conditions and a turret so restricted that to load the gun it must be elevated. The rate of fire of Soviet tanks is thus reduced to about three rounds a minute. Crew comfort is absolutely minimal and therefore the battlefield duration of Russian tanks is less than that of western ones. Another factor reducing efficiency is the lack of a turret basket; this means that when the turret is rotated, the crew must shuffle around with it. Ammunition storage is not well protected against fires or projectiles penetrating the fighting compartment and many internal explosions have been caused in this way. A further disadvantage is that fuel is stored in the right-hand side of the front of the hull and it has often been ignited by the heat generated by glancing shots off the glacis plate. External fuel storage increases the range of the tanks but forms a terrible fire hazard which the Arabs have tried to minimise by tying sandbags over the containers.

No tank has good visibility when fighting closed down and, as the Arabs tend to fight in this condition almost all the time, they suffer great disadvantages against the Israeli tank commanders who habitually go into battle standing up in their hatches. This leads to a most effective fighting force but a very high casualty rate among Israeli tank crews.

The tracks of Soviet tanks tend to snap after being run at high speed for any length of time; the inclusion of return rollers in the newer Soviet tank (T-64) has helped reduce this.

Finally, an advantage, Soviet tanks are equipped with infra-red night lighting and have often operated successfully at night.

Western tanks, with their heavier armour, better crew comfort, higher rate of fire and superior 'first hit kill' probability have enabled the numerically inferior Israelis usually to emerge the victors in any armoured battle. The tank the Israelis favour most, based on their experiences in three wars over 20 years, is the British Centurion.

Political developments since 1973

Following the cease-fire, Israel pulled her forces out of Egypt west of the Suez Canal and then evacuated a wide strip of Sinai running through (and including) the vital Khatmia, Jiddi and Mitla passes and extending down the west coast of Sinai almost to El Tur. She retained a large area on the Golan heights and UN troops have patrolled the borders with Syria and Egypt ever since. The reason for this evacuation of captured territory — so uncharacteristic of the Israelis — was a remarkable shift of American support away from Israel and towards Egypt, prompted perhaps by realisation that supplies of oil from Arab states are more vital to US prosperity than the intransigence of an expansionist Jewish state. US pressure on Israel to negotiate a permanent settle-

ment with her neighbours mounted during 1974-77 against a background of continued PLO terrorist acts and a growing closeness between Egypt and the western powers, while Soviet influence with Sadat crumbled.

In November 1977 Israeli premier Begin made his historic (and for him doubtless difficult) broadcast to the Arabs in which he offered peace and 'stretched out his hands' to them. Begin also quoted to them a passage from the *Koran* (Chapter 5 'The Table') which appeared to justify the presence in Palestine of the Israelis: 'O my people, enter the holy land which Allah has written down as yours'.

Eight days later (on November 19 1977) President Sadat of Egypt took his life in his hands and went to Israel. He was given a warm reception by the Knesset and by the Jewish people, but subsequent negotiations were hampered by Begin's refusal to give up his hold on the West Bank and the continued Israeli work on their settlement building programme in occupied territory (there are 16 settlements in the Gaza Strip, four around El Arish, three along the west coast of the Gulf of Akaba and plans for new work on the West Bank have only recently been stopped.

Israel was also loth to give up the oilfields at El Tur and Begin proved to be so much a prisoner of his extremist, hard-line past that prospects for a negotiated peace looked poor while he remained head of state.

By placing his political career, and indeed his life, at stake Sadat won acclaim and admiration from all those truly interested in a peaceful settlement of the Arab-Israeli crisis. He also received violent criticism from others whose motives might be considered questionable — the USSR, Gaddafi, Yassir Arafat and Assad of Syria.

Since losing Soviet support, Sadat's relations with America have blossomed while, on two visits to President Carter, Begin was received with cold politeness as US impatience at Israeli stubbornness over the West Bank and the Golan heights grew. Begin has said that there can be no withdrawal to 1967 borders if the USA gives arms to Arab states. To make matters worse, on March 11 1978 the PLO Al Fatah group raided Israel from the sea out of a base in south Lebanon and killed 36 civilians in one of their worst outrages. They were obviously hoping to provoke a harsh Israeli response and thus destroy all hopes of peace with Egypt and Begin was not statesman enough to temper his actions and avoid the trap. On March 15 1978 25,000 Israeli troops with massive armour, artillery and air support (including the use of US-supplied cluster bombs) rolled into southern Lebanon with the avowed aim of crushing the Al Fatah organisation there. By tacit agreement with the Syrians and their 30,000 strong 'Arab Peace keeping Force' (who were holding the ring in Lebanon between the Christians and the Moslems) the Israelis stayed south of the Litani river.

The IDF count the spoils as 350 'terrorists' dead, 20 captured; ten tanks, 20 anti-tank guns, 120 machine guns, 20 Katyusha rocket launchers, 20 recoilless rifles, 300 small arms and 35 tons of ammunition.

It is widely accepted that 90 per cent of the 21,000 strong Al Fatah organisation were well north of the Litani before the first Israeli shell burst and the attack fell on empty air or — more tragically — on the unhappy and innocent peasants living in south Lebanon. Terrorist garrisons were only encountered in any strength at Bint Jbeil, Tibnin, Maroun el Ras and el Khiyam. IDF losses were 18 dead and 80 wounded.

What became clear after the operation was the large-scale Soviet involvement in supporting the PLO, evidenced by captured documents, weapons and equipment. On March 24, in response to growing UN condemnation of the invasion, the IDF began to pull back from the Litani river, their place being taken by a UN Peacekeeping Force under Ghana's General Erskine and including Swedes, Norwegians, French and Nepalese soldiers.

Israel threatened to remain in south Lebanon if the UN troops failed to stop the PLO returning but the terrorists regarded the UN force as being there to evict the Israelis and not as a block to their continued operations. Incidents occurred along the Litani almost daily and the French contingent suffered several casualties. The prospects for peace in the area seemed poor.

Politically Israel's Arab enemies are more divided than ever before; Egypt wants peace and has the support of Saudi Arabia, Somalia and the Sudan, as well as the backing of the western powers.

Sadat was put on Yassir Arafat's death list and was opposed in his negotiations with Israel by the PLO, Syria, Algeria, Libya and South Yemen, with Iraq and Jordan hovering on the fringes of this camp.

In the short term Israel could profit by the Arab disarray but force of arms has only won her a breathing space — the eventual solution has to be a peace achieved by negotiation and including all parties — even the PLO.

The Ethiopian secessionist wars

Eritrea

The Eritrean seccessionist movement had caused the central government such anxiety that on December 16 1970 a state of emergency and military rule in the

province was declared. A six-mile wide strip along the Red Sea coast and the Sudanese border was designated a prohibited zone to prevent supplies reaching the guerrillas.

The Ethiopian Government accused Syria, Iraq and South Yemen of aiding the rebel, mainly Moslem, Eritrean Liberation Front (ELF) whose headquarters were in Damascus. Founded in 1956, the ELF had initially been a political organ aimed at achieving greater autonomy for their state but, when it became obvious that this was not to be granted, the ELF took up arms, most of which were supplied from the Sudan who also provided training bases.

The 2nd Division of the Ethiopian Army occupied Eritrea but guerrilla activity continued and on November 21 1970 the divisional commander, General Teshome Erghetu, was killed in an ambush between Asmara and Keren.

By December 1970 the ELF had some 2,000 men trained and armed with Soviet weapons supplied on credit by Libya. Their losses to date had been estimated at 1,000. Their support and strength grew apace and in 1974 they had about 8,000 armed men. According to some reports; they had used tanks and planes against government forces in a ten-day offensive in May 1973 in an area near the Sudanese border and had lost ten killed and seven wounded. On September 12 1973 the ELF had killed the deputy commander of the Ethiopian 2nd Division, General Yelam. Their attacks on the newly-opened Debarewa copper mines caused £150,000 damage and halted mining from March to December 1974.

By 1974 the ELF had been joined by a more radical and revolutionary movement, the 'People's Armed Liberation Forces' (PALF, later the PLF), composed mainly of Christians. After the military coup in Ethiopia in 1974, ELF activity slackened off and a government committee was set up to look into the province's grievances. No progress was made however and, by January 1975, the Ethiopian Army resumed operations against the rebels after the 'soft line' General Aman Andom had been executed by the military regime for opposing the use of force in Eritrea.

At that time government forces held the ports of Massawa and Assab as well as the Eritrean capital Asmara. ELF headquarters were at Kerora, near the Sudanese frontier, and their activities extended over the line Massawa-Asmara-Agordat and included bombings in Asmara itself. Government planes bombed suspected rebel areas causing much loss of life and a flow of refugees into the Sudan.

In January 1975 the ELF joined forces with the PLF and on January 28 the Provisional Military Administrative Council (PMAC) announced that full-scale war would be waged against the rebels.

Three days' fierce street fighting in Asmara followed but the guerrillas withdrew from the city after a relief column of 52 tanks and 20 armoured cars, with air support, had forced their way through from Addis Ababa on February 2. Severe reprisals against the Asmaran population followed and the garrison there rose to 17,000 men including 2,000 paratroopers.

Mr Sabeh, leader of the ELF-PLF and one-time leader of the EPLF, boasted abroad that Libya had sent his movement new arms worth $5 million and that offensive action would soon be taken. These arms included RPG-7 anti-tank missiles, SAM 7s and Soviet small arms. He also appealed to the world to stop the genocide being practised against Eritreans. Signs of unrest were also to be seen in Tigre and Begemder provinces whose governors defected to the ELF, two in a growing stream of Ethiopian military who were changing sides. Commander of the ELF forces was now General Goitom Gebre-Ezghi, formerly Chief of Eritrean Police.

International pressure was exerted on the central regime to end the war; Syria, Egypt, the UN Secretary General and President Amin were among those urging peace and President Numery of the Sudan, calling for a cease-fire and an amnesty, offered to mediate. The PMAC agreed to send a negotiating team to Khartoum to examine the Sudanese proposals but heavy fighting continued unabated and on February 12 the rebels blew up a strategic bridge over the Tocor river, north of Asmara. On February 15 new appointments were made in the positions of governor, police chief and commander of the 2nd Division in Eritrea and the 5,000-strong Asmara police force, who were ELF sympathisers, were replaced by 'reliable' men.

By this time government losses were estimated at 1,500 dead and there were over 2,000 Asmaran civilian fatalities. The PMAC sent Mr. Wodafo — Ethiopian foreign minister — to the USA to order more ammunition, but the Americans were now uneasy at the repressive nature of the conflict and delayed sending the $30 million worth of small arms ammunition for the M-1 carbines and the World War 2 pattern rifles of the Ethiopian Army. The ELF claimed to have 12,000 government troops trapped in Asmara and to have killed 2,000 and destroyed 41 tanks, and seven Canberra bombers and F-5 fighters.

On February 18 1975 Kuwait began supplying the ELF with military aid in addition to that received from Syria, Iraq, Libya and the PLO.

The northern town of Keren almost fell to the rebels in a five-day battle ending on February 28 in which both sides suffered heavy losses.

By June 1975 the Ethiopian Army had regained full control of Asmara, Keren and Massawa but the

ELF controlled the countryside in classic guerrilla manner. The government had 20,000 men in the province to counter 10,000 guerrillas and the PMAC reinforced its policy of not allowing news coverage of events by expelling the few remaining foreign correspondents. There were now 40,000 Ethiopian refugees in the Sudan and the PMAC had cut off supplies of foreign famine relief stores to Eritrea in an effort to starve them into submission.

More trouble developed in May 1975 when 5,000 armed Danakil (or Afars) warriors attacked government troops and between June 3 and 12 killed hundreds of them and cut the road from Assab to Addis Ababa. The fighting was in protest against government attempts to levy new taxes in an area where the Sultan (Ali Mirah Manfere) traditionally collected his own taxes from his three million largely nomadic subjects. In reprisal the troops destroyed the town of Aisaita and killed 2,500 civilians. The Sultan and his followers fled to Djibouti where they set up the 'Afar Liberation Front' (ALF) and raided into Wollo province.

In Eritrea a stalemate had continued since June and, on September 14 1975, General Teferi Benti ordered the Americans to close their base at Kagnew in Eritrea and to evacuate all their personnel from Ethiopia as a reprisal for non-delivery of military aid.

The PMAC now turned to the same supplier of arms as was keeping their troublesome rebels in business — the USSR!

During the period mid-1975 to mid-1976 the PMAC's grip on Ethiopia became shaky as they failed to beat first the Eritreans, then the ALF and now the Tigren secessionists.

Another political group had entered the scene — the Ethiopian Democratic Union (EDU) headed by General Jyassu Mengasha and operating along the Sudanese border in Begemder, Gojjam and Wollega provinces.

On April 7 1976 the PMAC had mobilised over 40,000 peasants to fight against the Eritreans. They were armed with a variety of old weapons and assembled in camps along Eritrea's borders. The incentive was the promise of land and loot in the conquered country. The ELF and the Tigre secessionists attacked these camps and inflicted losses on their poorly equipped opponents on June 1 and 2. The threat melted away. Meanwhile, on May 16, the PMAC had offered to talk peace with the PLF but this was rejected.

Later, in June 1976, Somali Ethiopian separatists in the Ogaden region seized control of much of Bale region and were reinforced by 2,000 armed men from Somalia.

The Ethiopian Government now received aid from an unexpected quarter when in February 1976 40 Israeli military advisers arrived in Addis Ababa to aid in the training of a division of troops for which (alleged the ELF-PLF) the Israelis would provide the equipment. Israel was concerned that the Red Sea should not become an 'Arab lake' which might happen if the Sudanese-backed secessionists won.

In August 1976 the PMAC offered regional autonomy and an amnesty to the Danakil region. In response, 48 members of the ALF were reported to have returned to Ethiopia from Djibouti.

By October 14 1977 the UN High Commissioner for Refugees reported that 74,000 Eritreans had fled to the Sudan to escape the fighting in that province where the ELF/PLF controlled most of the countryside with the Ethiopian 2nd Division holding the main towns. There were also about 30,000 Sudanese refugees in south-west Ethiopia! The guerrillas held about 500 prisoners while the Army had 1,000.

To complicate matters, the Sudan accused the Ethiopian Government of setting up training camps for the 'Sudanese National Front' whose aim was the downfall of Numery's government. The EDU, in whose area these camps were, had captured 56 would-be terrorists and handed them over to the Sudanese government.

The Sudan and Egypt reaffirmed their mutual defence pact in January 1977.

During March 1977 the Derg (as the PMAC was known since February 1977) launched a new drive to revolutionise Ethiopian society by means of local vigilante groups authorised to use 'immediate revolutionary measures' against those offering resistance. Vigilantes were most active in Bale, Harar and Sidamo provinces bordering Somalia.

The EDU were now at a strength of over 10,000 in Begemder province and captured Metemma and over 300 members of the Ethiopian 'Flame Division' in April 1977 near Dabat. EDU leader, General Jyassu Mengasha stated that his group was not in collusion with the ELF/EPF but would form a united front with all opposition factions to oust the military junta and return the empire to democratic rule.

The ELF drew its support from Saudi Arabia and Kuwait but had lost South Yemeni support in 1976 when that regime began to support the Derg. On April 6 1977 the ELF captured Tessenai complete with 300 Ethiopian soldiers while the EPLF had set up a government in the area under its control along the Red Sea coast of Eritrea. Movements towards unity were made by the ELF, the ELF/PLF and the EPLF with the aim of combining political and military operations.

The ELF had 22,000 men, the EPLF 12,000 and the ELF/PLF about 3,000.

The EPLF captured Karera and Um Mager in January 1977 and Nafka on March 24 1977.

The Sudan's relationships with Addis Ababa went into decline in the first half of 1977 as their support for the Ethiopian separatist movements became more obvious; the Sudanese Socialist Union (SSU) (sole permitted political body in that country) publicly declared their commitment for the Eritrean guerrillas Sudanese President Numery also accused certain Arab states — specifically Libya — of loaning troops to the Derg for use against his country. The war of words continued and on April 12 1977 Lieutenant Colonel Mengestu Haile Mariam, leader of the Derg, charged the Sudanese Army with attacks on targets within Ethiopia using artillery and tanks; the loss of Tessenei and Metemma to the ELF and EDU was also admitted for the first time.

In retaliation for the expulsion from Ethiopia of US, British, Belgian, French, Italian and Sudanese diplomats and correspondents, the USA cancelled delivery of F-5E fighter bombers and M-60 tanks to the Ethiopian forces. The Derg turned to Russia, China, North Korea and Cuba for alternative assistance which was soon forthcoming. Fidel Castro visited Addis Ababa on March 14-16 1977 after General Arnaldo Ochoa Sanchez — member of the Central Committee of the Cuban Communist Party — had been there in the February. By May some 20 Cuban military advisers were in Ethiopia to assist in combating the Eritrean secessionists, while over 45,000 Soviet AK47 assault rifles were sent from Czechoslovakia, East Germany and Yugoslavia as well as 31 T-34 tanks and 40 APCs from South Yemen. Libya was supposed to have financed these deals and Russia was to be granted naval base facilities in Massawa on the Red Sea.

More modern T-54 tanks arrived in May 1977 and Lieutenant Colonel Mengestu visited the USSR also in that month.

In June 1977 the Western Somalia Liberation Front (WSLF) stepped up its operations in the Ogaden region and their secretary general, Abdulahi Hassan Mahmud, stated on September 4 1976 that his movement claimed 'all territory east of a line running from Moyali (in Kenya) through Awash (100 miles east of Addis Ababa) to El Adde (on the border between Ethiopia and Djibouti) — an area of 240,000 square miles containing 10,000,000 people claimed to be ethnic Somalis.

The WSLF launched about 5,000 heavily-armed men into the Ogaden and by May 1977 claimed to have destroyed six Ethiopian battalions (3,000 men) and 11 tanks and to have captured seven towns.

On June 1 the guerrillas attacked the vital Addis Ababa-Djibouti railway along which about 60 per cent of Ethiopia's foreign trade used to flow. The Derg confirmed later that month that five bridges on the line had been destroyed.

By July 24 1977 the WSLF had routed and largely destroyed the 3rd and 4th Ethiopian divisions, captured over a dozen arms and ammunition dumps and attacked the Air Force base at Gode where the 5th Brigade of the 4th Division suffered heavy loss. WSLF men were welcomed by the populace throughout the area they occupied although their military claims were later largely discounted by Kenyan observers.

On August 9 the WSLF held all the railway between Dire Dawa and the Djibouti border. Ethiopian Government sources produced evidence that Somali regular Army units were employed in the Ogaden but this was strenuously denied in Mogadishu. Remains of a Somali MiG-21, shot down during an attack on Jijiga, caches of captured Somali weapons and two talkative Somali soldiers were produced by the Derg to substantiate their case in August 1977.

The WSLF advance continued up to 'the gates' of Harar and Dire Dawa where the Ethiopian Army and militia successfully resisted them, manning World War 2 defence works, in August. Heavy fighting developed around these two towns with casualties to both sides reaching the thousands. By the end of September the true position was still hidden behind conflicting claims, but the WSLF had withdrawn from the strategic Gara Marda pass, 50 miles west of Jijiga on the road to Harar. During this contest, the WSLF was supported by the ALF from Djibouti, the Oromo Liberation Front set up by Gallas in Bale province and the Somali Abo Liberation Front, also in Bale province..

On September 7 1977 Ethiopia broke off diplomatic relations with Somalia and reciprocal action was taken in Mogadishu next day.

In Eritrea meanwhile the ELF, EPLF and ELF-PLF had consolidated their hold on the rural areas and captured a number of towns including Decamere (EPLF 22 miles south of Asmara on July 6), Keren (EPLF, July 8), Deksa (south of Asmara, EPLF, August 4), Adi Qala (50 miles south of Asmara, ELF, August 14), Mandafara (30 miles south of Asmara, ELF, August 24) and Agordat (ELF and ELF-PLF on August 31).

The garrison of Asmara itself was reinforced by means of airlifts and central government forces still held Massawa, Assab and Barentu plus some other minor towns.

The various guerrilla organisations were still unable to achieve complete unity amongst themselves and their effectiveness was thus reduced.

On June 10 1977 a strong Ethiopian Army force recaptured Humera from the EDU which then struck back on July 9, taking Enda Selassie in Tigre province and several smaller towns in Begemder as well as '4,800' Ethiopian prisoners. A reversal was sub-

sequently admitted by the Derg who declared formation of a mass People's Militia to fight the war on two fronts. The effective blockade of Ethiopia due to the cutting of the Djibouti-Addis Ababa rail link had brought the country to the brink of famine according to the UN Food and Agriculture Organisation.

But help was on the way to Lieutenant Colonel Mengistu's embattled Derg in the form of effective Soviet and Cuban hardware backed up by plentiful 'advisers', 3,000 in number, as agreed in July 1977 between the three states.

Some sources estimated arms quantities to be supplied as 48 MiG-21 fighters, 200 T-54/-55 MBTs and quantities of SAM 3s and SAM 7s; in September 1977 the fighters were reported to have been delivered in sections for assembly in Ethiopia and 40 Ethiopian pilots were in the USSR undergoing flying training. Three hundred Soviet tanks and 28 lorry-mounted multiple rocket launchers had also apparently arrived by sea at Assab, together with Cuban advisers and technicians.

Canada and West Germany joined those western governments which stopped giving economic aid to the Derg in the face of this massive Communist interference, but the EEC continued to finance irrigation schemes in the country. Iraq added its voice in support of Somalia and the Eritreans but Somalia remained very short of weapons and ammunition as cautious western governments refused to contribute to what might have become a very grave international situation.

In November 1977 the flood of Soviet and Cuban advisers and weapons had enabled preparations to begin for a counter-offensive against the WSLF forces by Harar, while frantic efforts were made by the Derg to expand their demoralised Army into a six-division force of 70,000 men equipped with 56 T-34s, 400 T-54/55s, some T-62s, 200 APCs, 300 guns of 100 mm-152 mm calibre, 50 BM-21 rocket launchers, 57 mm AA guns, SAM 3s, SAM 7s and Sagger ATGWs. The Ethiopian Air Force received 60 MiG-21s, 30 Mi8 helicopters, some Mi6s and a few MiG-17 fighters.

It is obvious that it would take a rather primitive Army with low morale some time to cope with a huge expansion programme as well as learning how to master, maintain and service sophisticated weapons and equipment. The sudden Ethiopian counter-offensive mounted from Harar and Diredawa on February 6 1978 pointed to heavy and direct involvement in the fighting by the Cubans and Soviets, now thought to number 5,000 and 1,500 respectively. This suspicion was reinforced when it was learned that the advance had been supported by a tank force air-lifted over the Ahmar mountain obstacle to a position north-east of Jijiga by the giant Mi6 Russian helicopters. Somali troops reported that the crews of the tanks involved were white except for one Ethiopian in each vehicle and that artillery and close air support on a lavish scale were also evident.

Even though taken in front and rear by superior tank forces (apparently no infantry was used) the WSLF troops held on grimly in the Ahmar mountains and it was not until March 6 that Jijiga fell to the 'Ethiopians'.

Egypt and Saudi Arabia had begun supplying Somalia with arms (35 T-54/55s, SAMs, artillery and ammunition from the former, 60 AMX tanks and ammunition from the latter), but these supplies arrived too late to affect the fighting in the Ogaden. Iran also sent support. The Somalis accused the Ethiopians (who follower up the armoured spearheads through Jijiga and Aysha) of genocide in the captured areas with animals and humans being slaughtered in a vengeful massacre.

In neighbouring Somalia the military defeat (Somali Army units had undoubtedly been involved in the Ogaden fighting) led to an attempted military coup in Baidoa, 230 kilometres north-west of Mogadishu. Colonel Abdullaahi Yusuf led 2,000 soldiers in an abortive uprising which found little support and melted away. Colonel Yusuf fled to neighbouring Kenya.

Having successfully pacified the Ogaden, the Cubans and Russians turned their attentions to the long-standing Eritrean rebel problem, and the ever-increasing Ethiopian Army prepared to settle the scores with the main secessionist group within the country.

Strangely enough, among other foreign aid being given to the Derg at this time, was a considerable Israeli commitment. Although both Israel and the USSR have a common aim in not wanting to see the Red Sea an 'Arab lake', they make very odd bedfellows considering the Soviet support for Israel's enemies in the past.

On April 4 1978 the EPLF claimed a new success in the region by capturing Adi Caieh (on the road from Addis Ababa to Asmara) from Derg troops. As road communications with government forces in Asmara have been impossible for months, the Derg (or rather their Communist military advisers) began an extensive airlift of reinforcements and supplies into that place on April 25.

The immediate aims of the operation would be firstly, to open the Addis Ababa-Asmara road and secondly, to clear the way from Asmara to the Red Sea port of Massawa which would become yet another base for the powerful and expanding Soviet fleet.

In face of this threat the EPLF and the ELF announced formation on April 29 of a joint military command.

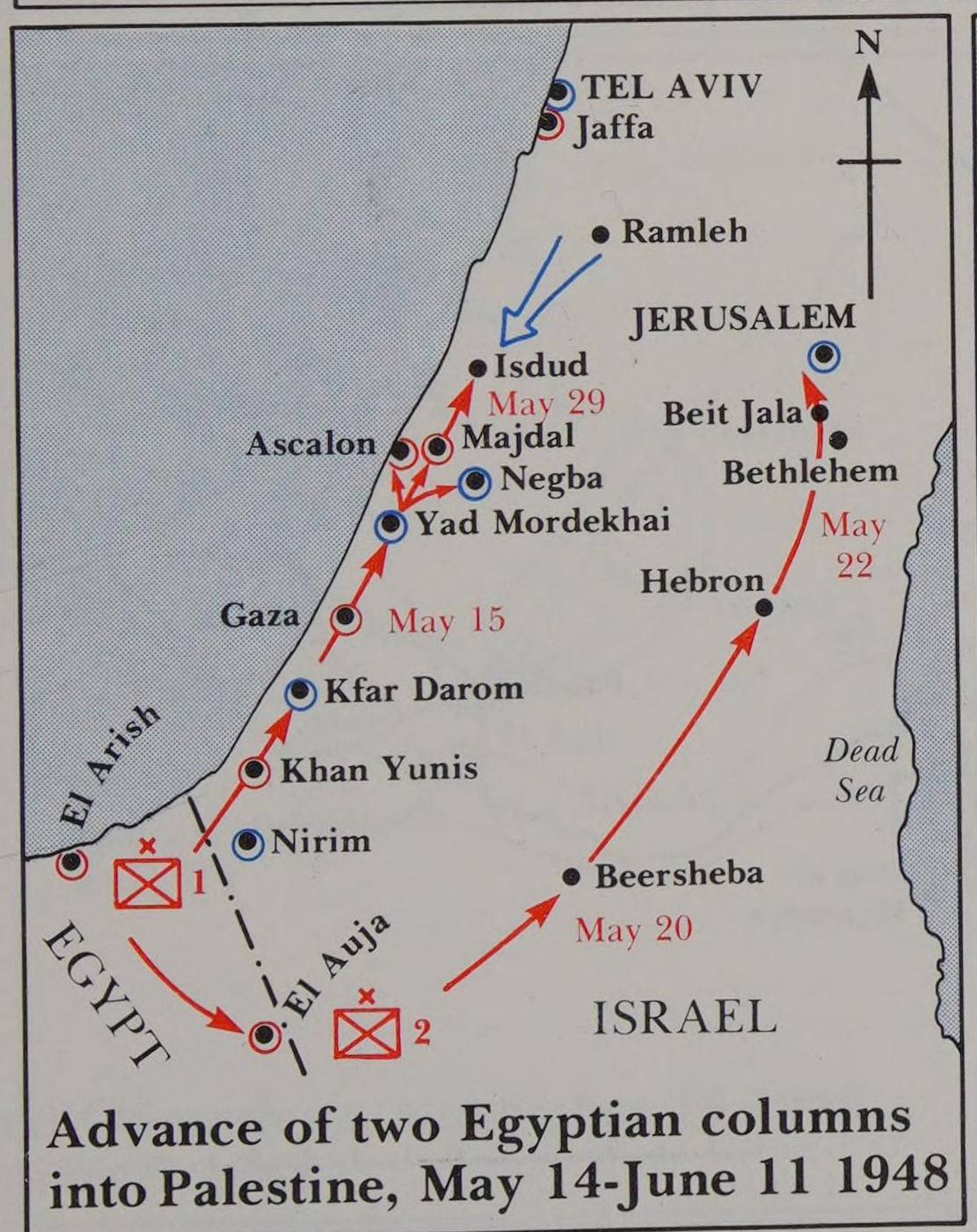
Section 2

ATLAS OF THE MIDDLE EAST WARS

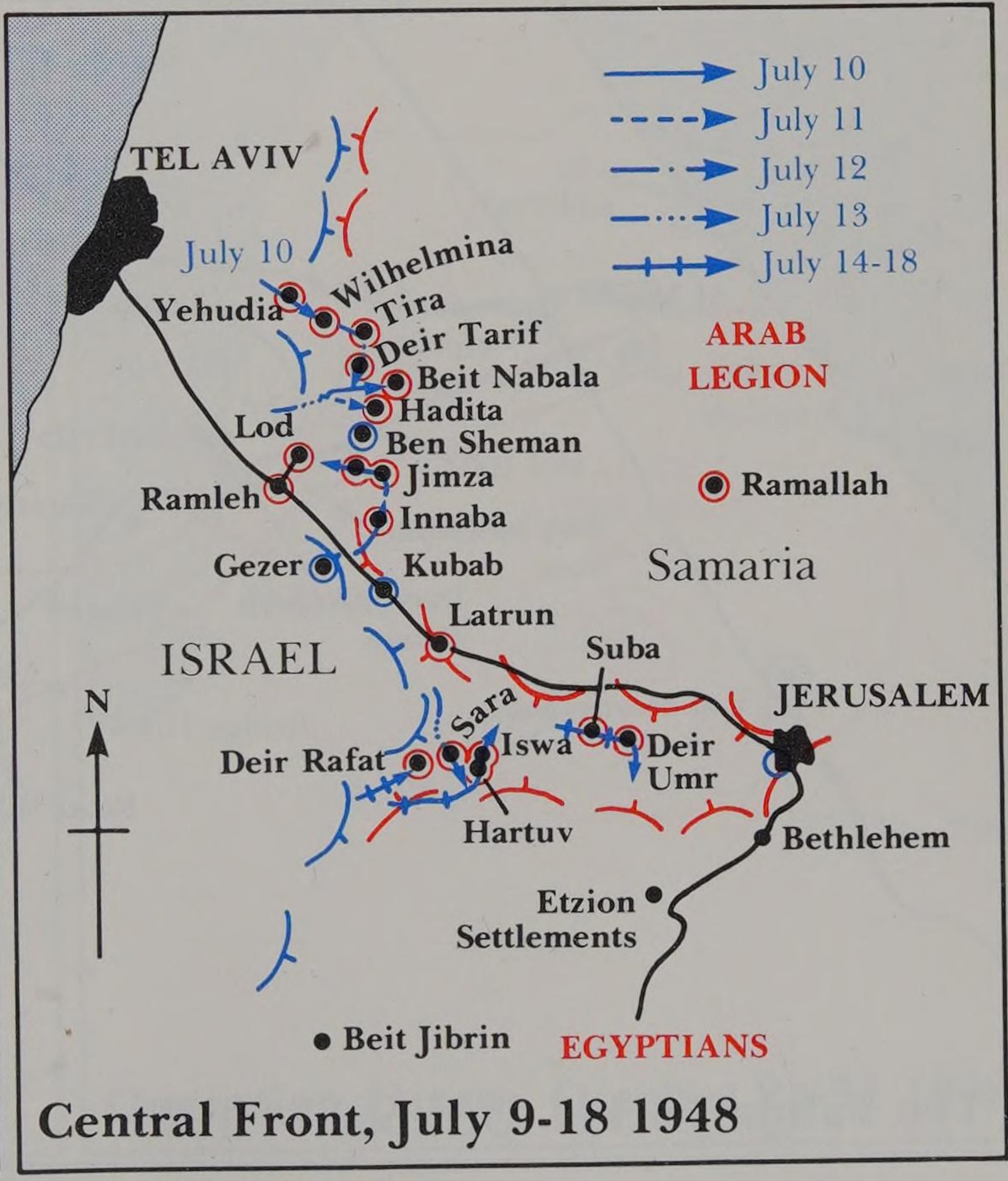
Note on the maps: red and blue have been used to differentiate opposing forces. On all maps involving Arab-Israeli conflicts the Arabs have been shown in red and the Israelis in blue.

Tactical signs used on maps

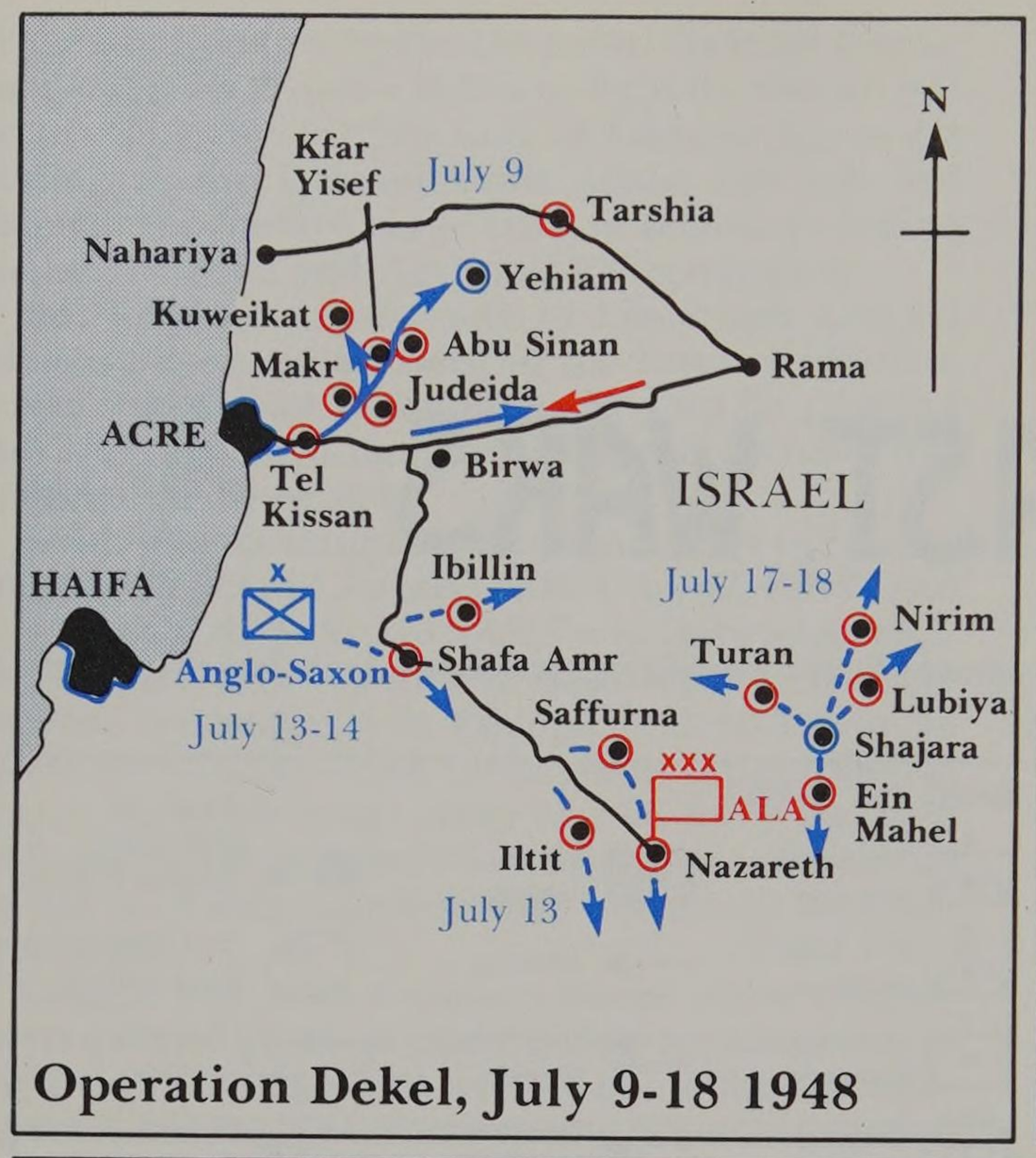
- 1 — 1st Army
- 5 — 5th Infantry Division
- Armoured Brigade
- Paratroop Brigade
- Infantry Battalion
- SP Artillery Battalion
- Recce Company
- Signals Company
- Transport Battalion
- A heavy battalion of any arm
- Logistic Company
- Motorised Infantry Division
- 2 — 2nd Mechanised Infantry Division
- 7 — 7th Armoured Brigade
- Mechanised Infantry Brigade
- AA Artillery Battalion
- A/T Artillery Battalion
- Artillery Company
- Engineer Platoon
- HQ and Staff Company
- Repair Company
- Advance
- Repelled advance
- Future or past move
- Defence line
- Attack by Mechanised Infantry Brigade
- Area held by 7th Tank Division
- Battalion position
- Direction of recce probe
- Artillery position



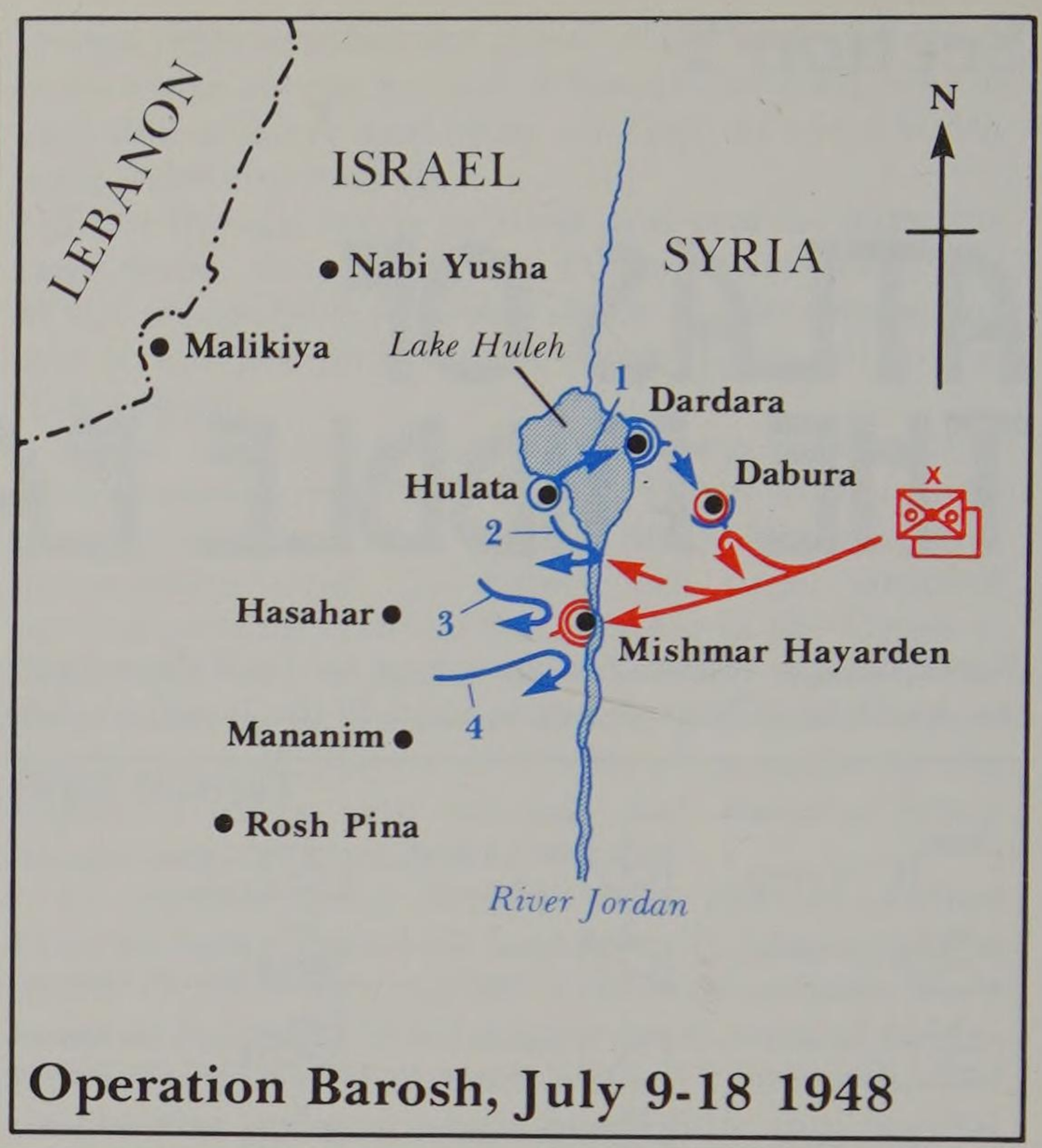
Advance of two Egyptian columns into Palestine, May 14-June 11 1948



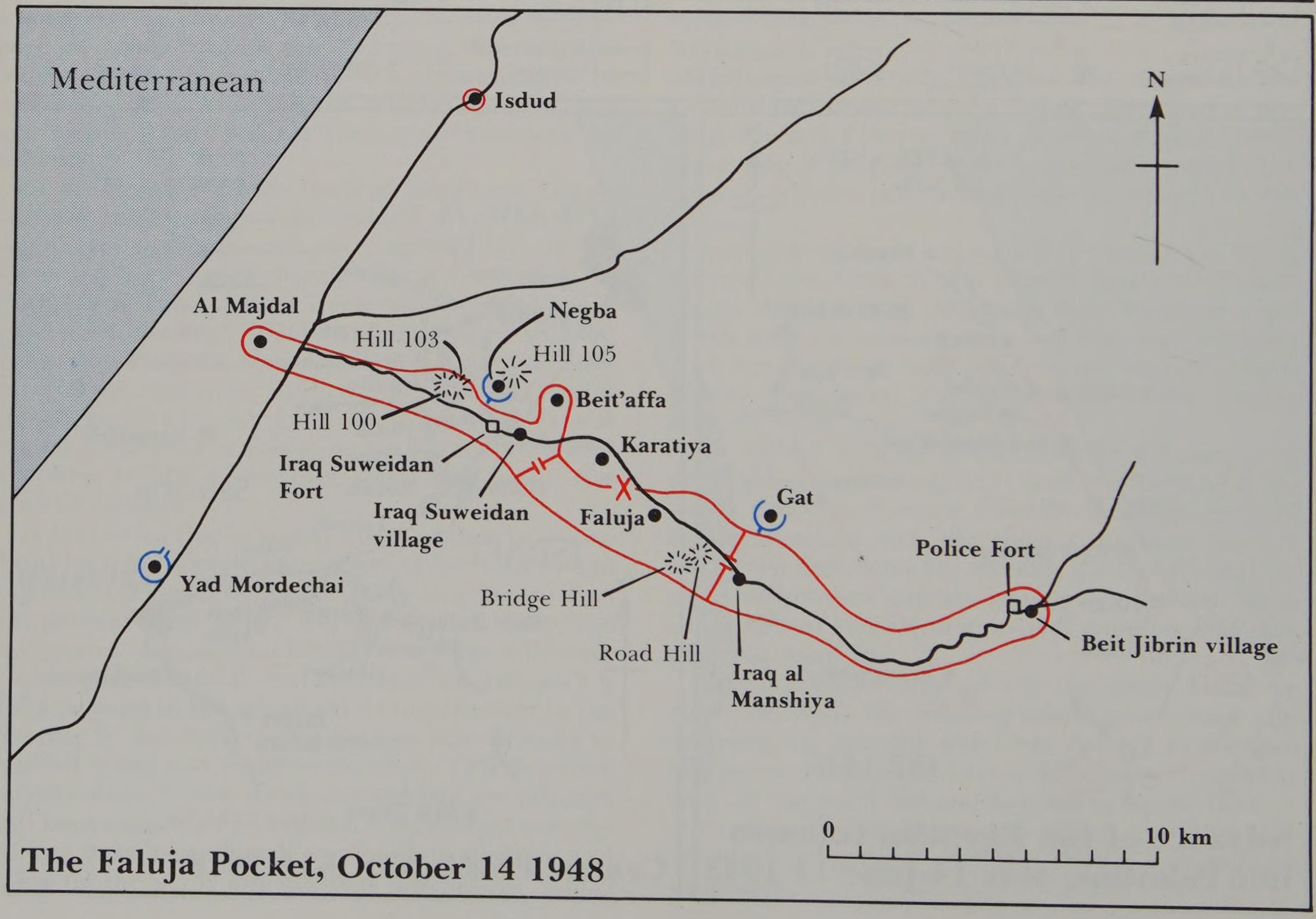
Central Front, July 9-18 1948



Operation Dekel, July 9-18 1948



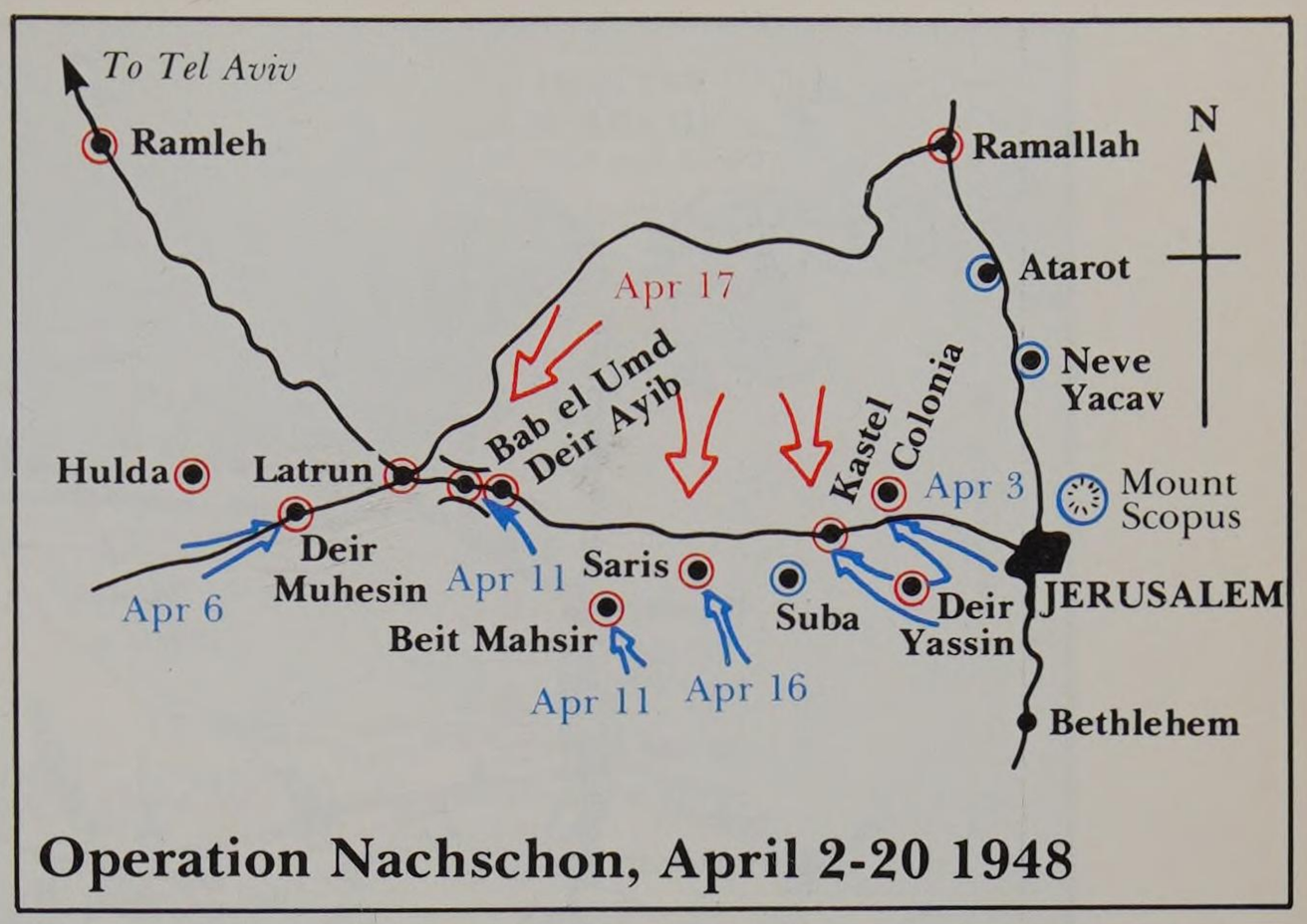
Operation Barosh, July 9-18 1948



The Faluja Pocket, October 14 1948



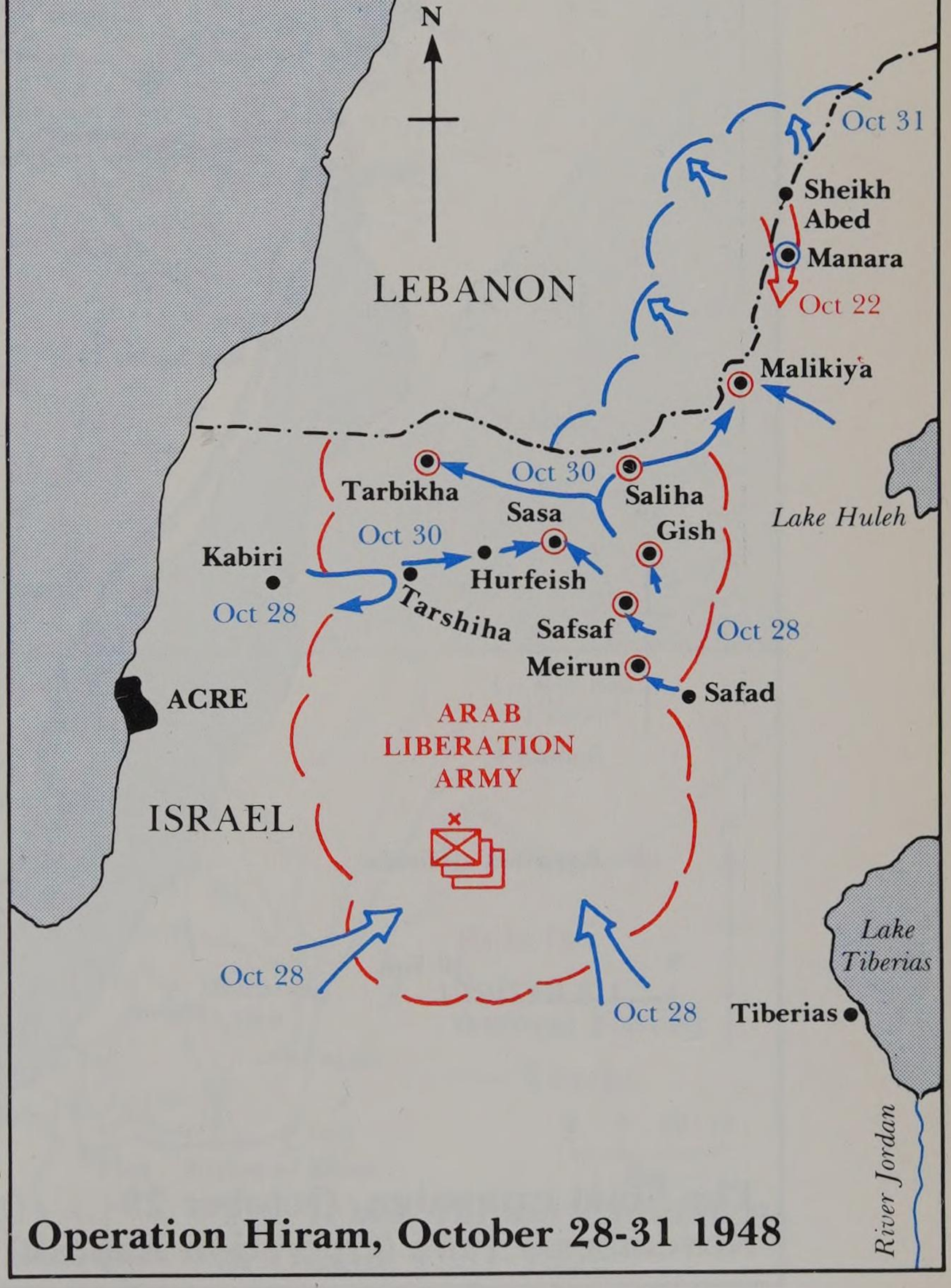
Operation Ten Plagues, October 15-21 1948



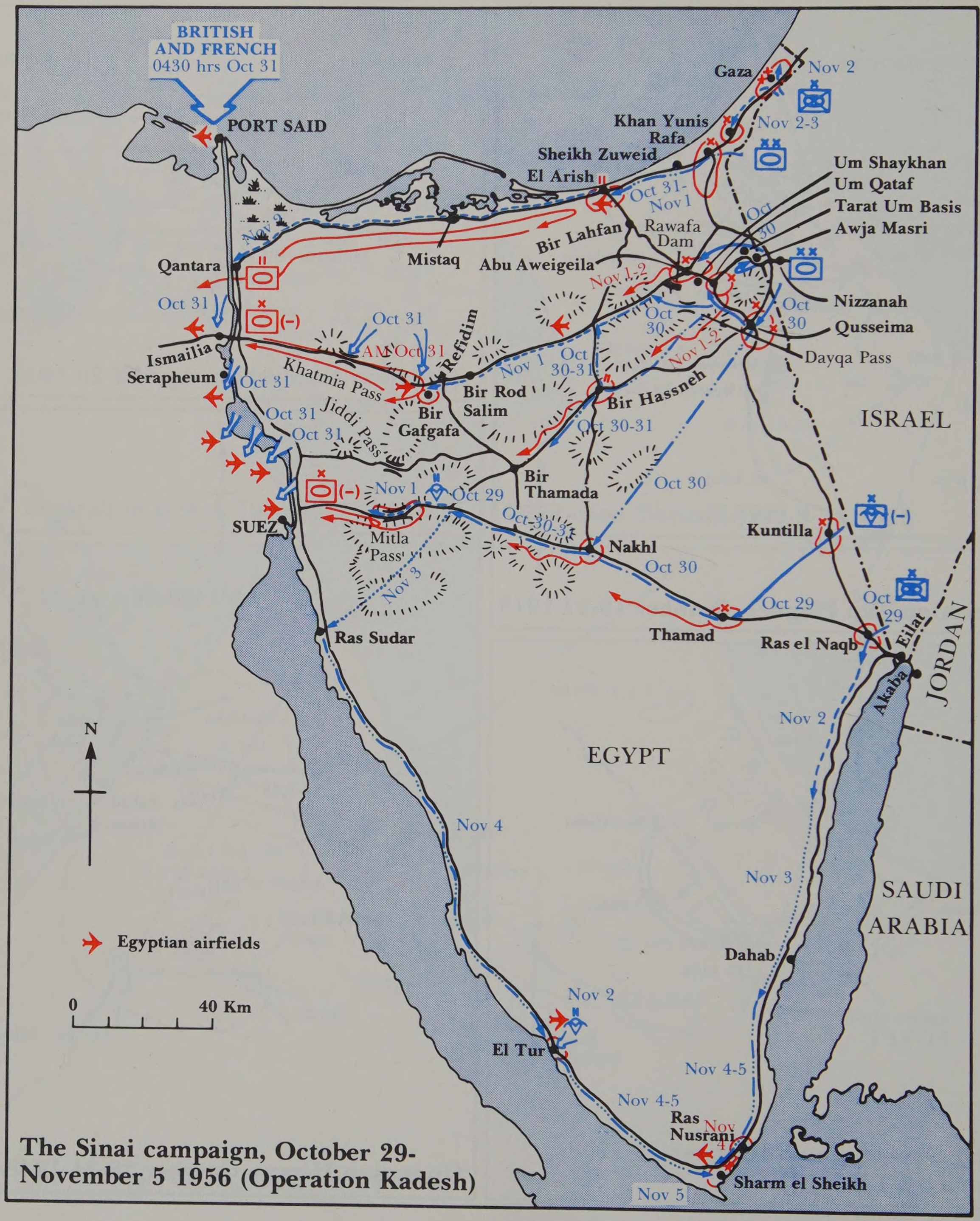
Operation Nachschon, April 2-20 1948



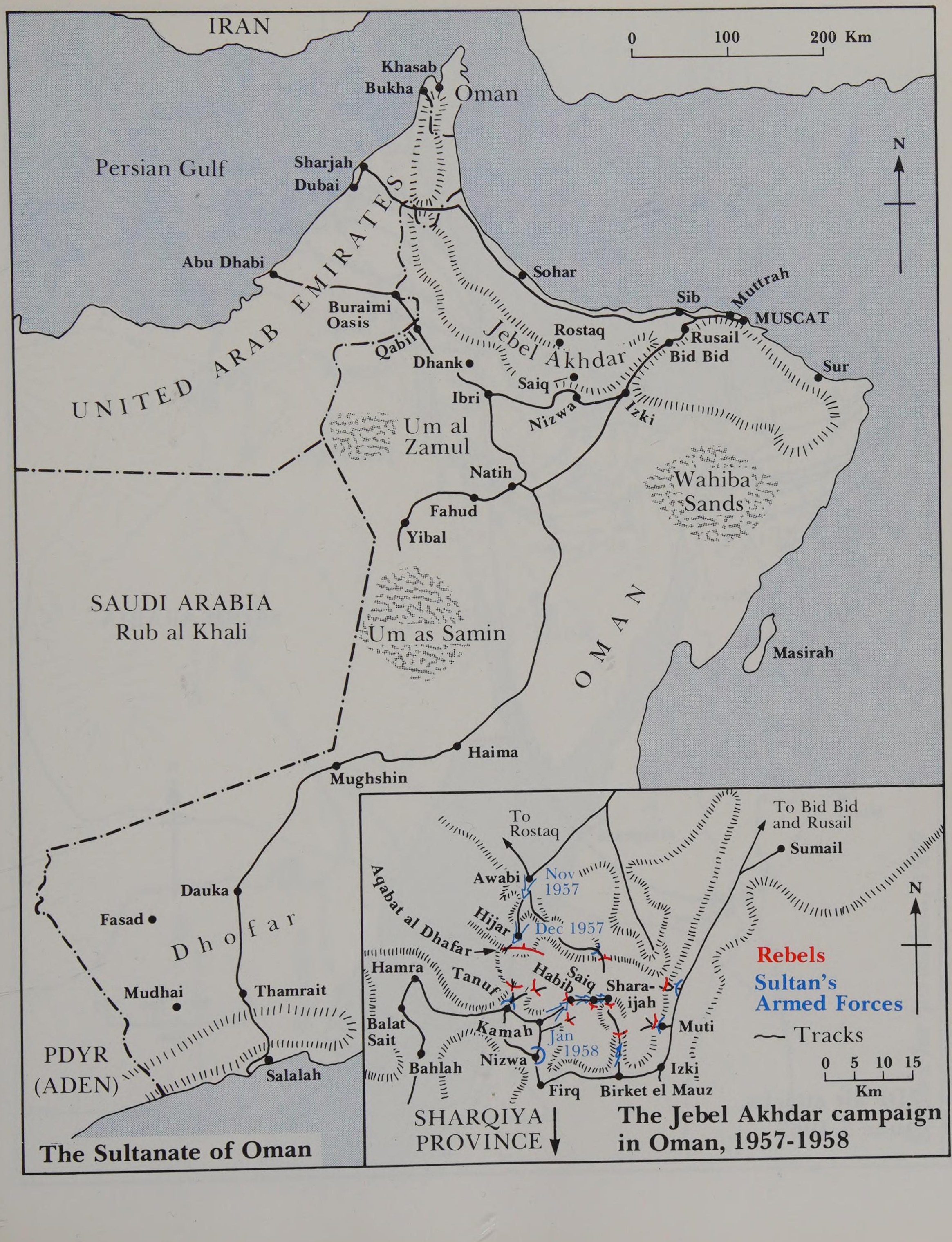
Final Operations, November 19 1948-January 7 1949

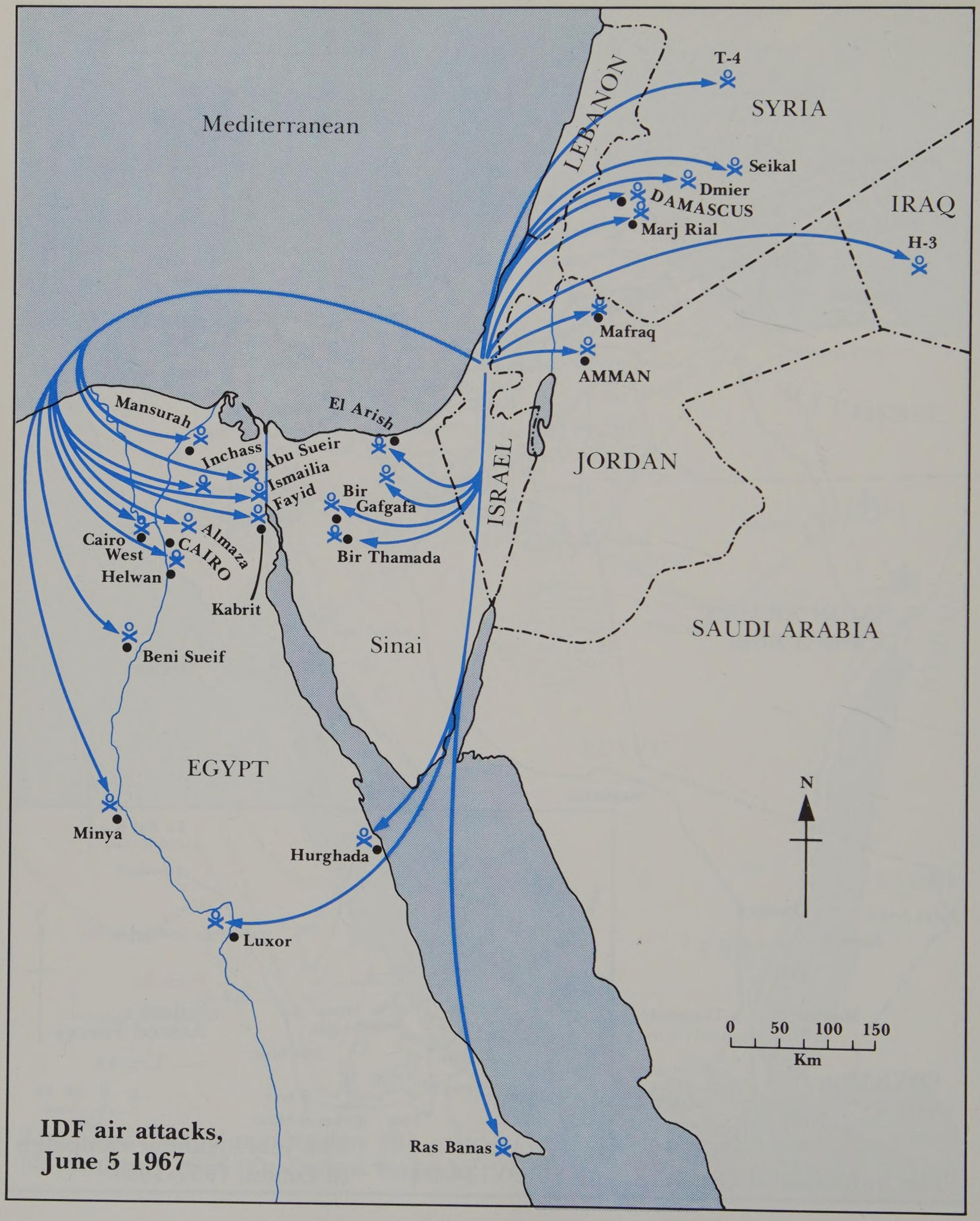


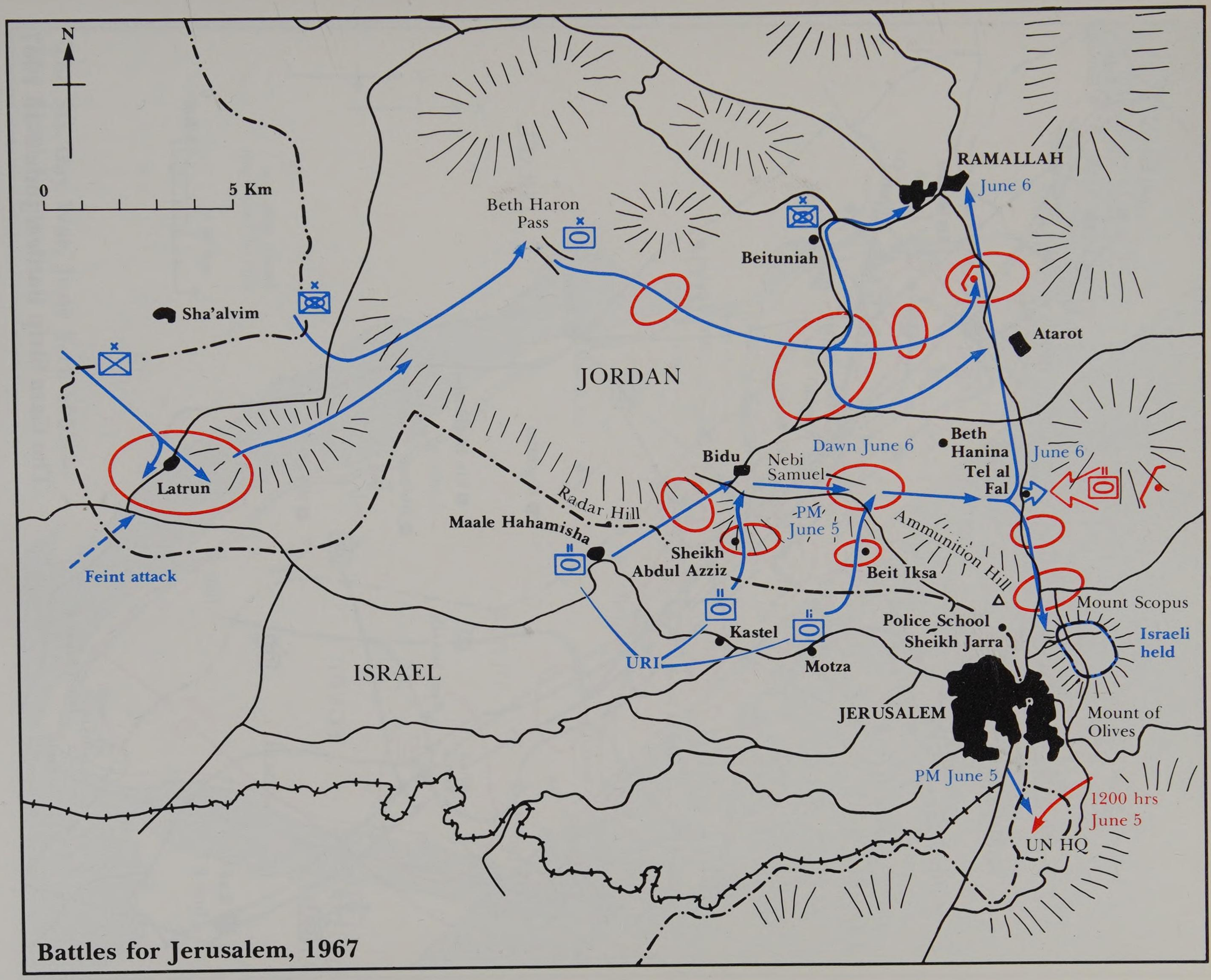
Operation Hiram, October 28-31 1948



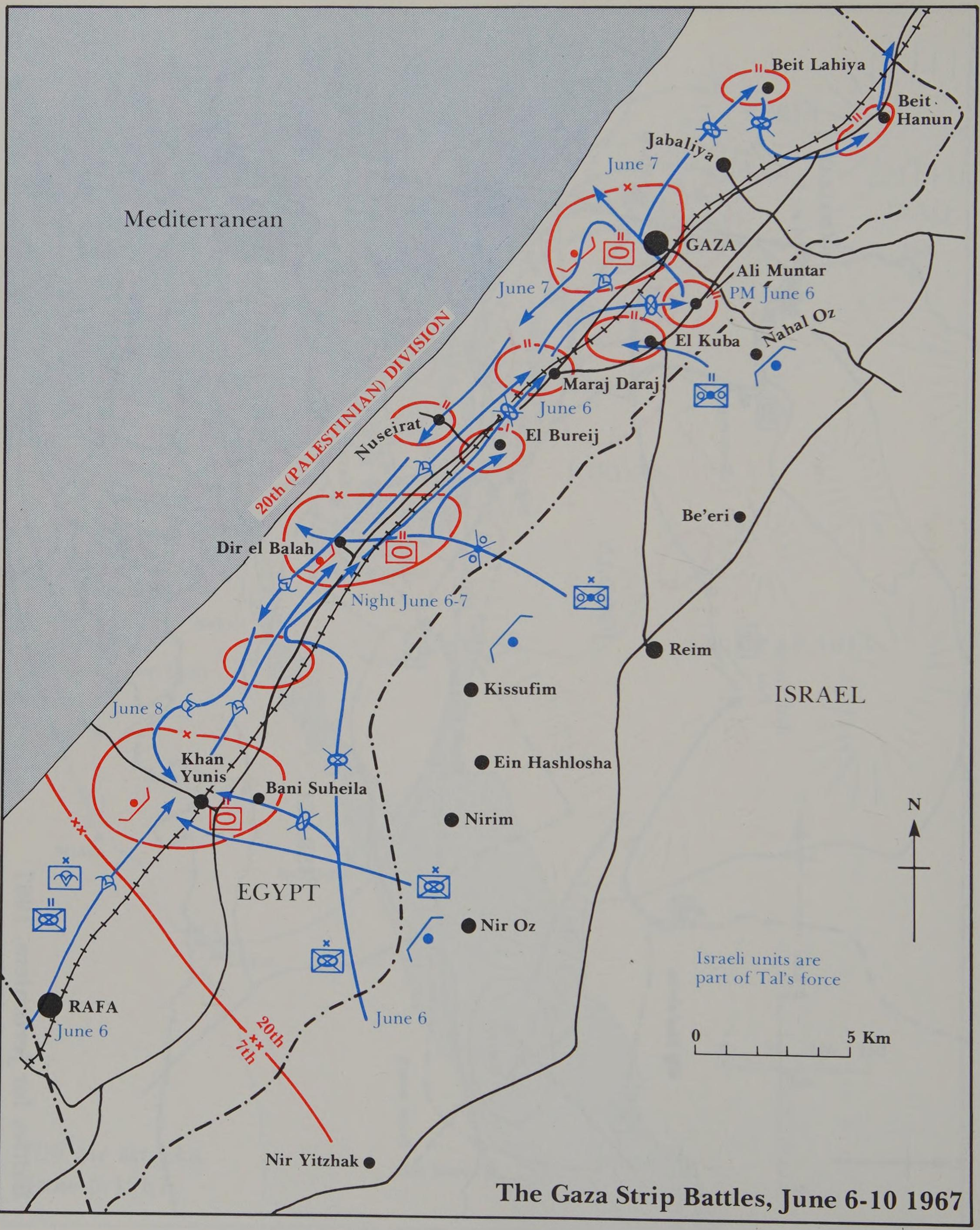
The Sinai campaign, October 29-November 5 1956 (Operation Kadesh)


IRAN
0 100 200 Km
N
Khasab
Bukha
Oman
Persian Gulf
Sharjah
Dubai
UNITED ARAB EMIRATES
Abu Dhabi
Sohar
Sib
Muttrah
MUSCAT
Buraimi Oasis
Qabil
Dhank
Rostaq
Jebel Akhdar
Rusail
Bid Bid
Sur
Saiq
Ibri
Nizwa
Izki
Um al Zamul
Natih
Wahiba Sands
Fahud
Yibal
SAUDI ARABIA
Rub al Khali
Um as Samin
OMAN
Masirah
Haima
Mughshin
Dauka
Fasad
Dhofar
Mudhai
Thamrait
PDYR (ADEN)
Salalah
The Sultanate of Oman
To Rostaq
To Bid Bid and Rusail
Sumail
Awabi
Nov 1957
Aqabat al Dhafar
Hijar
Dec 1957
Hamra
Tanuf
Habib
Saiq
Shara-ijah
Muti
Balat Sait
Kamah
Jan 1958
Nizwa
Bahlah
Izki
Firq
Birket el Mauz
Rebels
Sultan's Armed Forces
Tracks
0 5 10 15
Km
SHARQIYA PROVINCE
The Jebel Akhdar campaign in Oman, 1957-1958

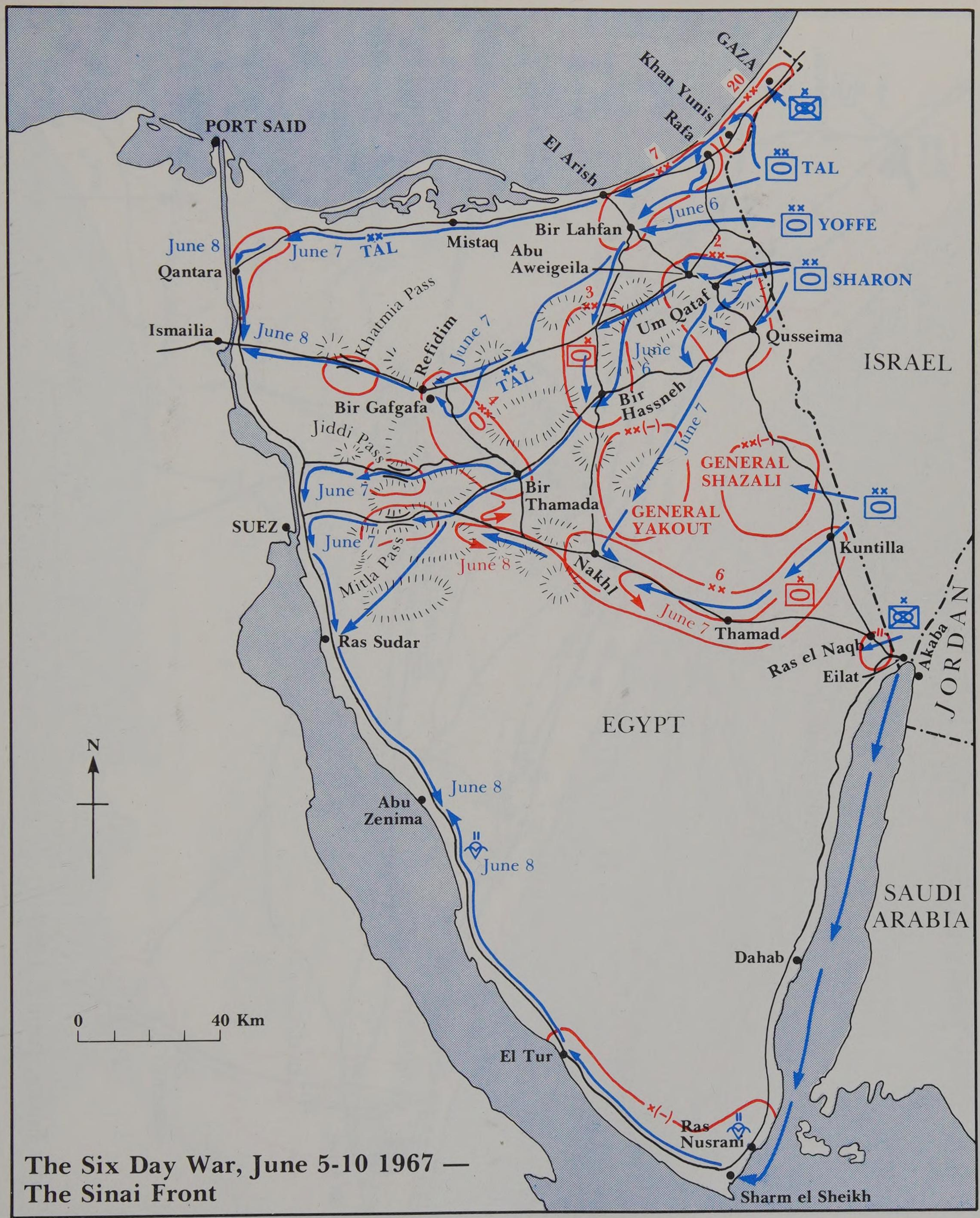

Mediterranean
LEBANON
SYRIA
T-4
Seikal
Dmier
DAMASCUS
Marj Rial
IRAQ
H-3
Mafraq
AMMAN
JORDAN
ISRAEL
El Arish
Mansurah
Inchass
Abu Sueir
Ismailia
Fayid
Bir Gafgafa
Bir Thamada
Almaza
Cairo West
CAIRO
Helwan
Kabrit
Sinai
SAUDI ARABIA
Beni Sueif
EGYPT
Minya
Hurghada
Luxor
Ras Banas
N
0 50 100 150
Km
IDF air attacks,
June 5 1967



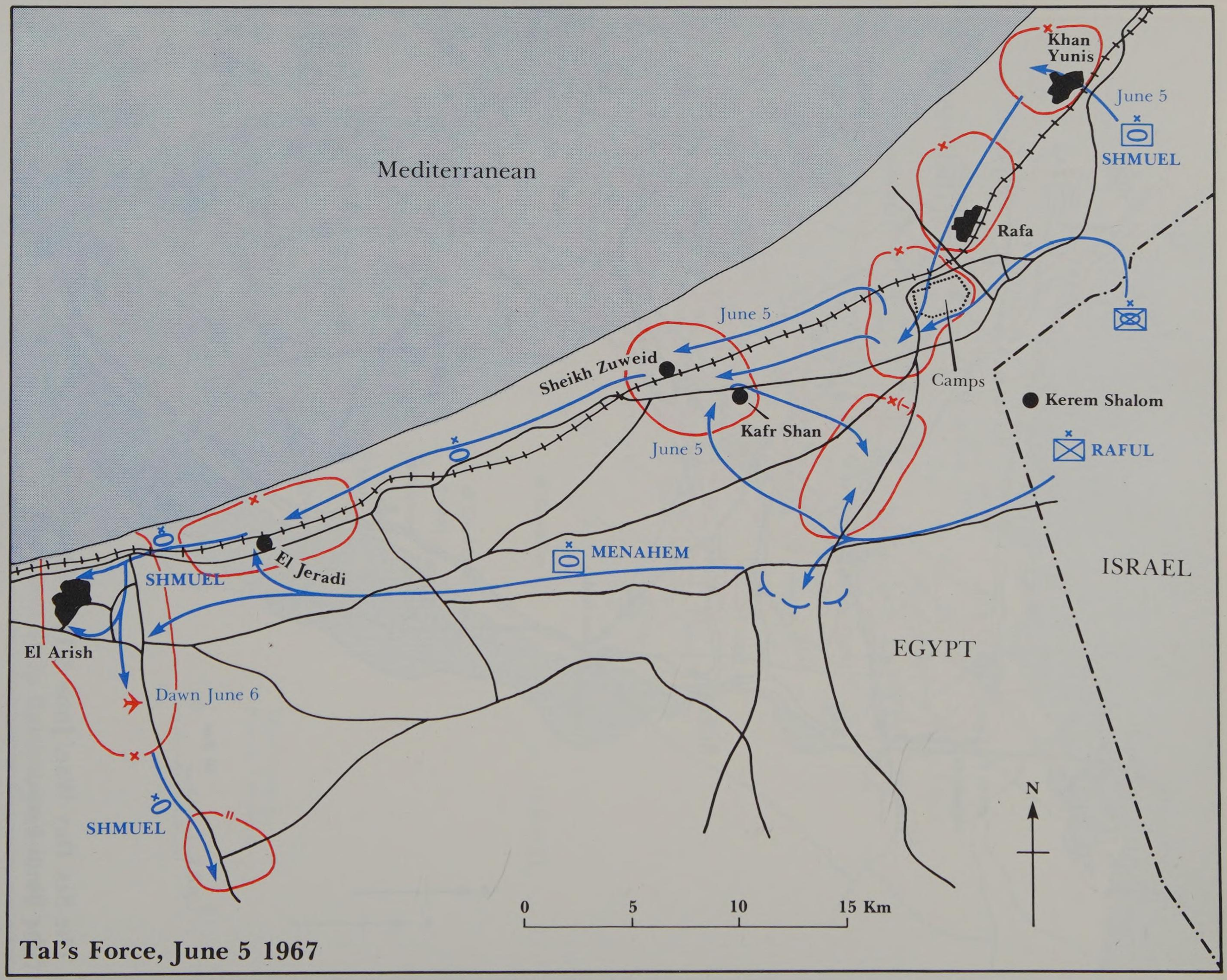
Battles for Jerusalem, 1967



The Gaza Strip Battles, June 6-10 1967



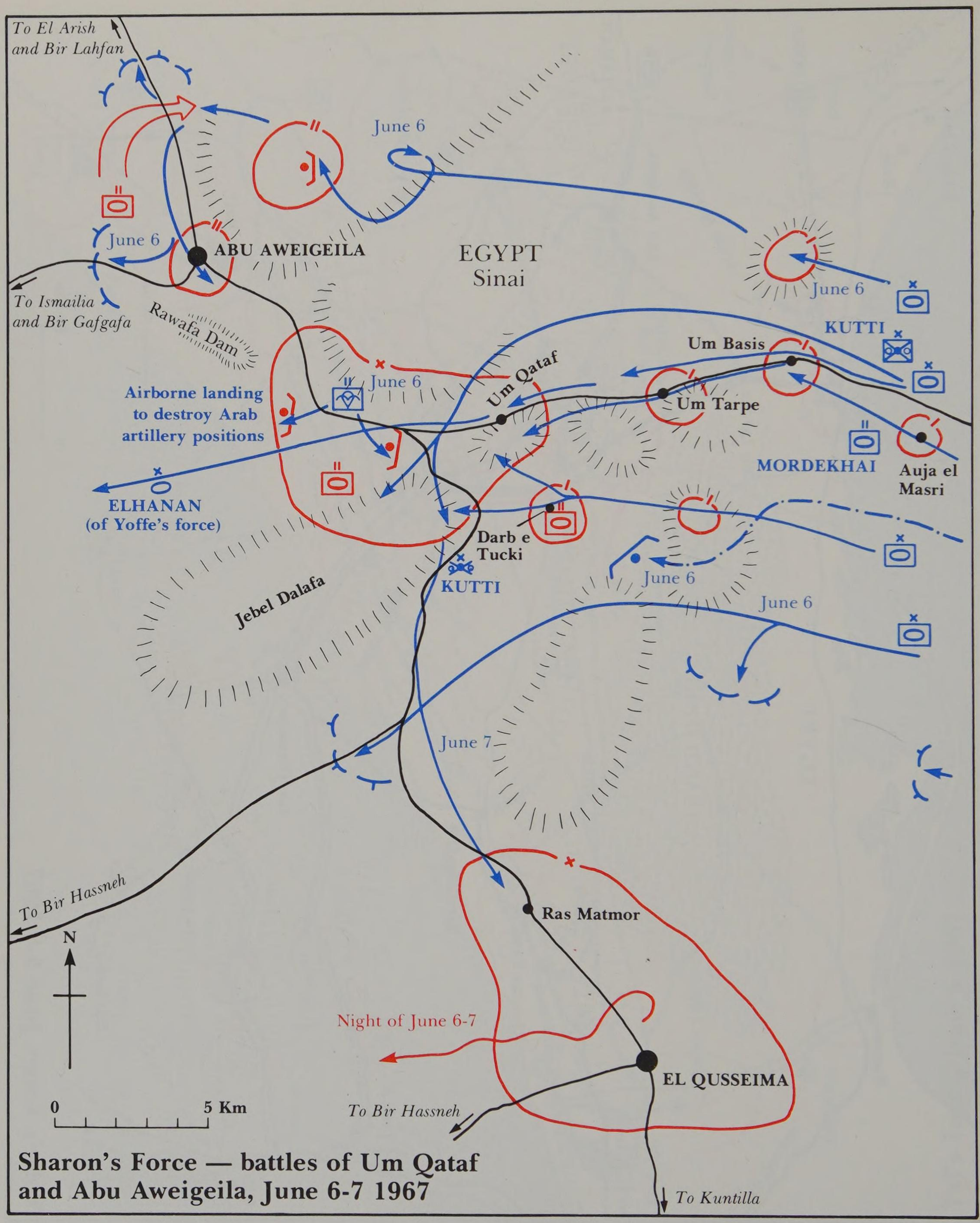
The Six Day War, June 5-10 1967 — The Sinai Front



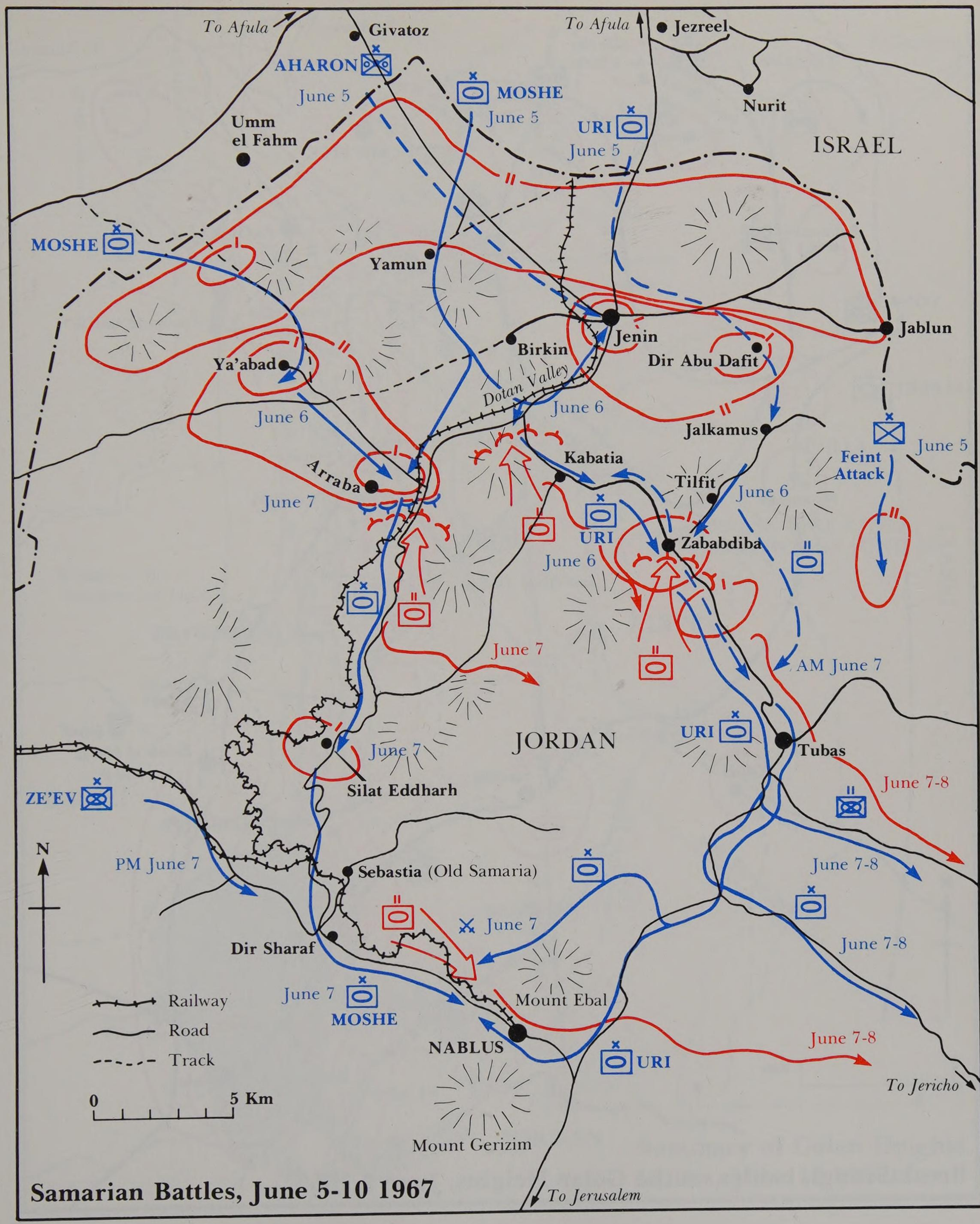
Tal's Force, June 5 1967

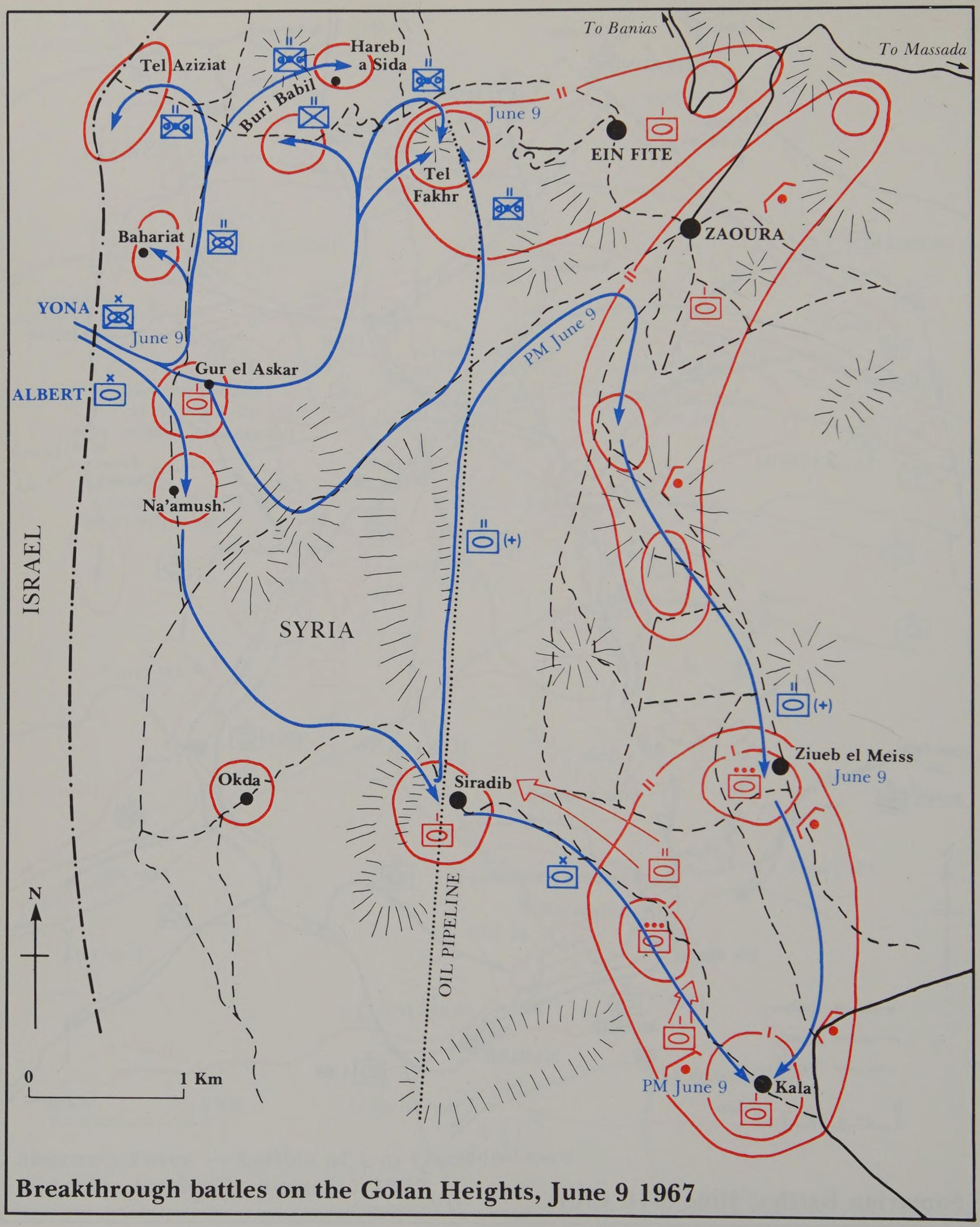
Khan Yunis
Rafa
ISRAEL
El Arish
Rumani
EGYPT
To Qantara
June 5
ISSKA
(Air Logistic Support)
Bir Lahfan
Wadi Maridin
SAND DUNES
Night battles June 5-6
Abu Aweigeila
To Ismailia
Sinai
Um Qatef
ELHANAN
Jebel Libni
June 6
Jebel Hilal
Khatmia Pass
Refidim
Qusseima
Bir Gafgafa
Dawn June 7
Bir Hassna
Jebel Yalek
June 8
June 8
Jiddi Pass
June 8
Bir Thamada
Mitla Pass
SUEZ
June 7-8
Night battle
June 8
Ras Sudar
Nakhl
Road
Track
N
0
20 Km

Yoffe's Force, June 5-8 1967

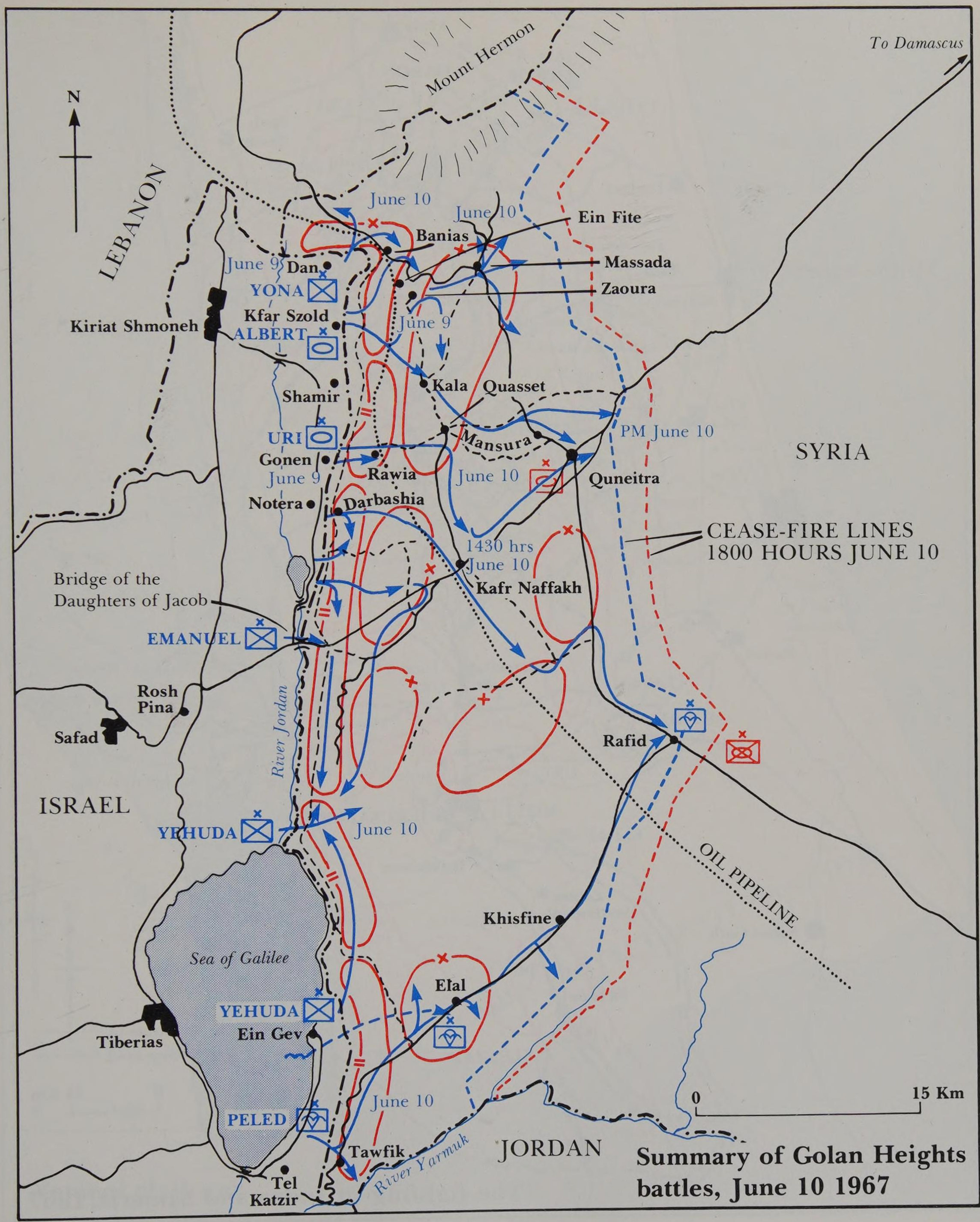


Sharon's Force — battles of Um Qataf and Abu Aweigeila, June 6-7 1967

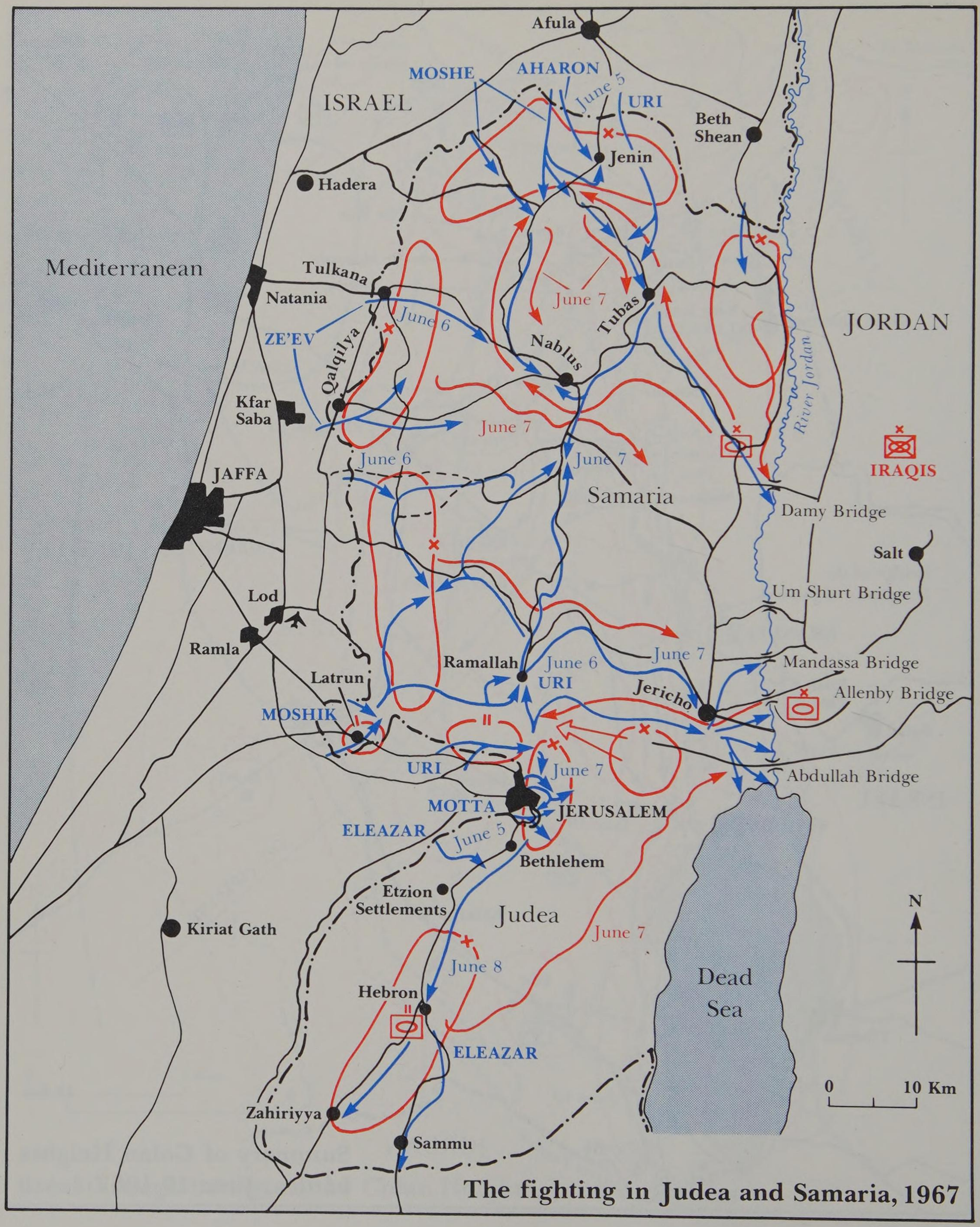

To Afula
Givatoz
AHARON
June 5
MOSHE
June 5
To Afula
Jezreel
Nurit
URI
June 5
ISRAEL
Umm
el Fahm
MOSHE
Yamun
Jenin
Jablun
Birkin
Dir Abu Dafit
Ya'abad
Dotan Valley
June 6
June 6
Jalkamus
Kabatia
Feint
Attack
June 5
Arraba
June 7
Tilfit
June 6
URI
Zababdiba
June 6
June 7
AM June 7
URI
JORDAN
Tubas
June 7
Silat Eddharh
ZE'EV
June 7-8
N
PM June 7
Sebastia (Old Samaria)
June 7-8
June 7
Dir Sharaf
June 7-8
Railway
Road
Track
June 7
MOSHE
Mount Ebal
NABLUS
June 7-8
URI
To Jericho
0
5 Km
Mount Gerizim
Samarian Battles, June 5-10 1967
To Jerusalem



Breakthrough battles on the Golan Heights, June 9 1967



Summary of Golan Heights battles, June 10 1967



The fighting in Judea and Samaria, 1967



Yemeni civil war

Dhofar Province of the Sultanate of Oman — the Dhofar campaign

0 40 80 Km

N

Makinat Shihan

Habarut

PDYR

(ADEN)

Mudhai

Thamrait (Midway)

Heiron

Sherishitti Caves

DAMAVAND LINE

LEOPARD LINE (later the Hornbeam Line)

Haluf

Ayun

Kushaat

Kaftawt

Zeak

Hawf

Sarfait

Dhalqut

Qairoon

Ashinhaib

Ghadow

Makinat al San

HAMMER LINE

Rakhyut

Safqut

Salalah

Jibjat

Mughsayl

Ma'murah

Medinat al Haq

Raysut

Arzat

Wadi Arzat

Taqa

Tawai Atair

Wadi Darbat

Indian Ocean

Mirbat

Juffa

Sudh

General map of northern fronts 1973

0 10 20 Km

N

Mediterranean

SIDON

LEBANON

River Litani

TYRE

ACRE

HAIFA

ISRAEL

Rosh Pina

Dan

Kfar Szold

Petroleum Road

Kafr Naffakh

Banias

Mount Hermon

DAMASCUS

Qatana

Kiswe

Zakiyah

Mazrat Beit Jaan

Sasa

Shaqhab

Kanakir

Massada

Khan Arnabah

Kafr Nasij

Ghabaghib

Jaba

Mansura

Kafr Shams

Aqraba

Sanamein

Qneitra

En Nakl

Wadi Sakhr

El Kushniya

Jasim

SYRIA

Rafid

GOLAN HEIGHTS

Khisfin

Roked Canyon

Sheikh Sa'd

Tasil

Sheikh Miskin

Sea of Galilee

Ein Gev

Fiq

TIBERIAS

Wadi el Harir

River Yarmuk

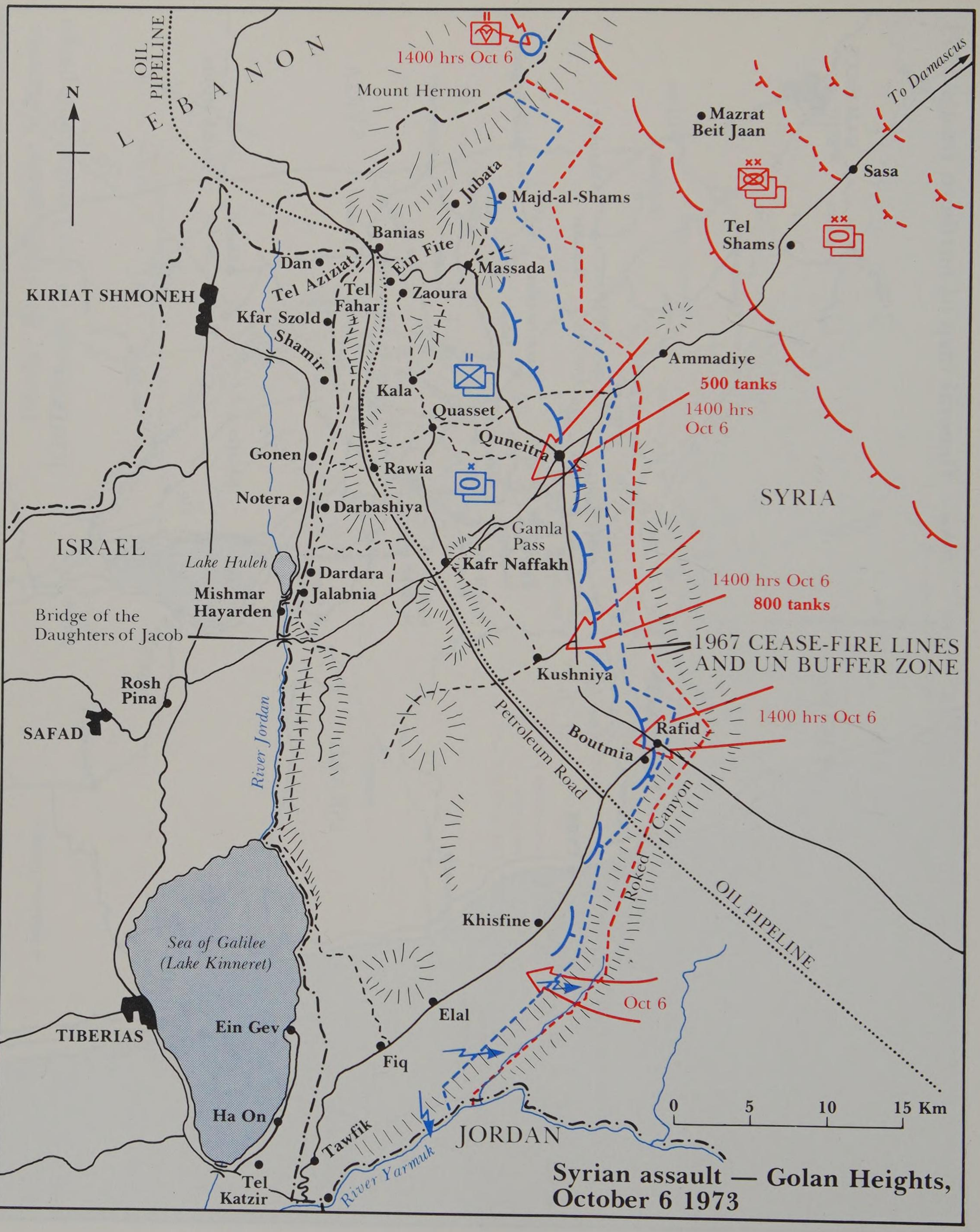
OIL PIPELINE

Nazareth

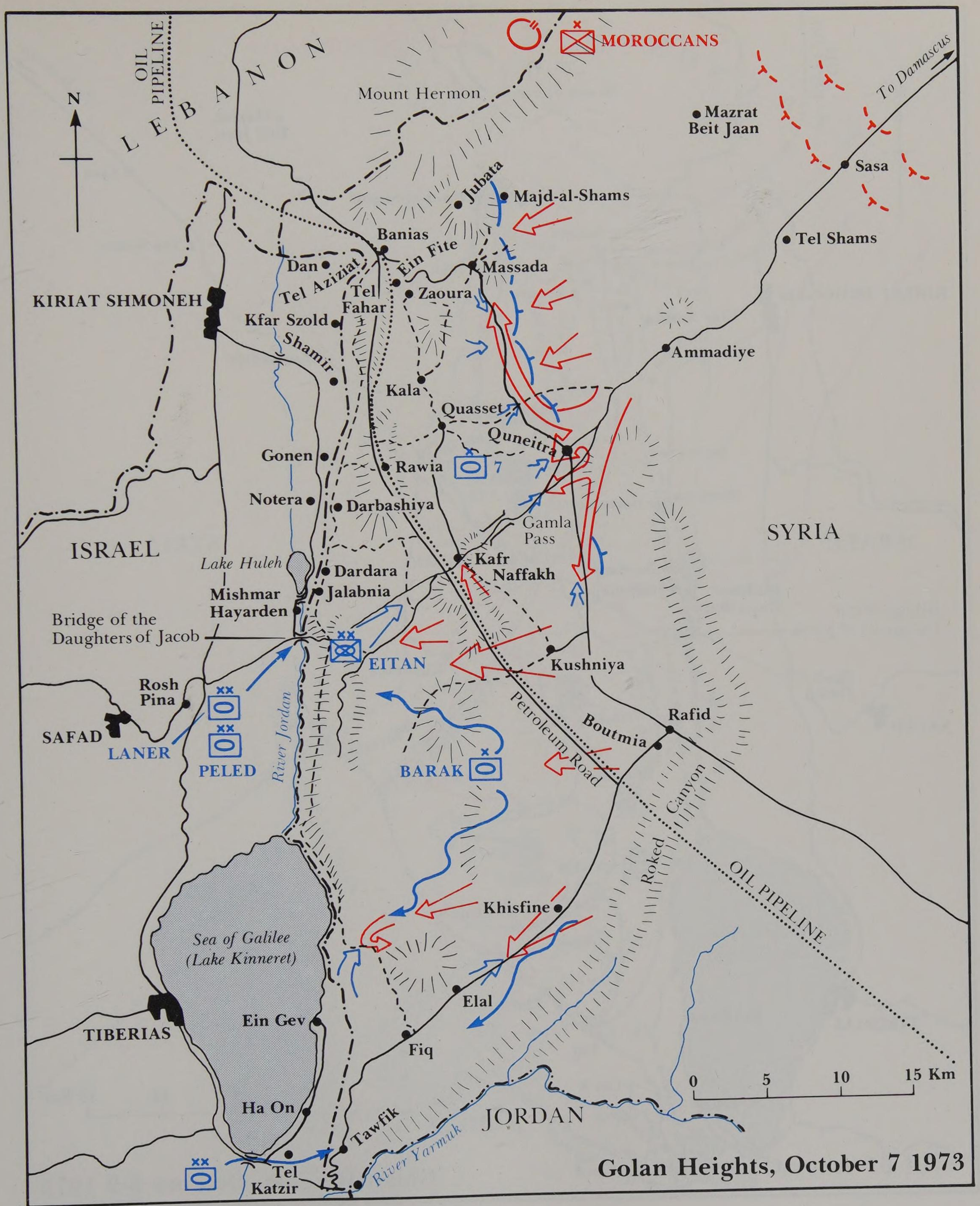
River Jordan

JORDAN

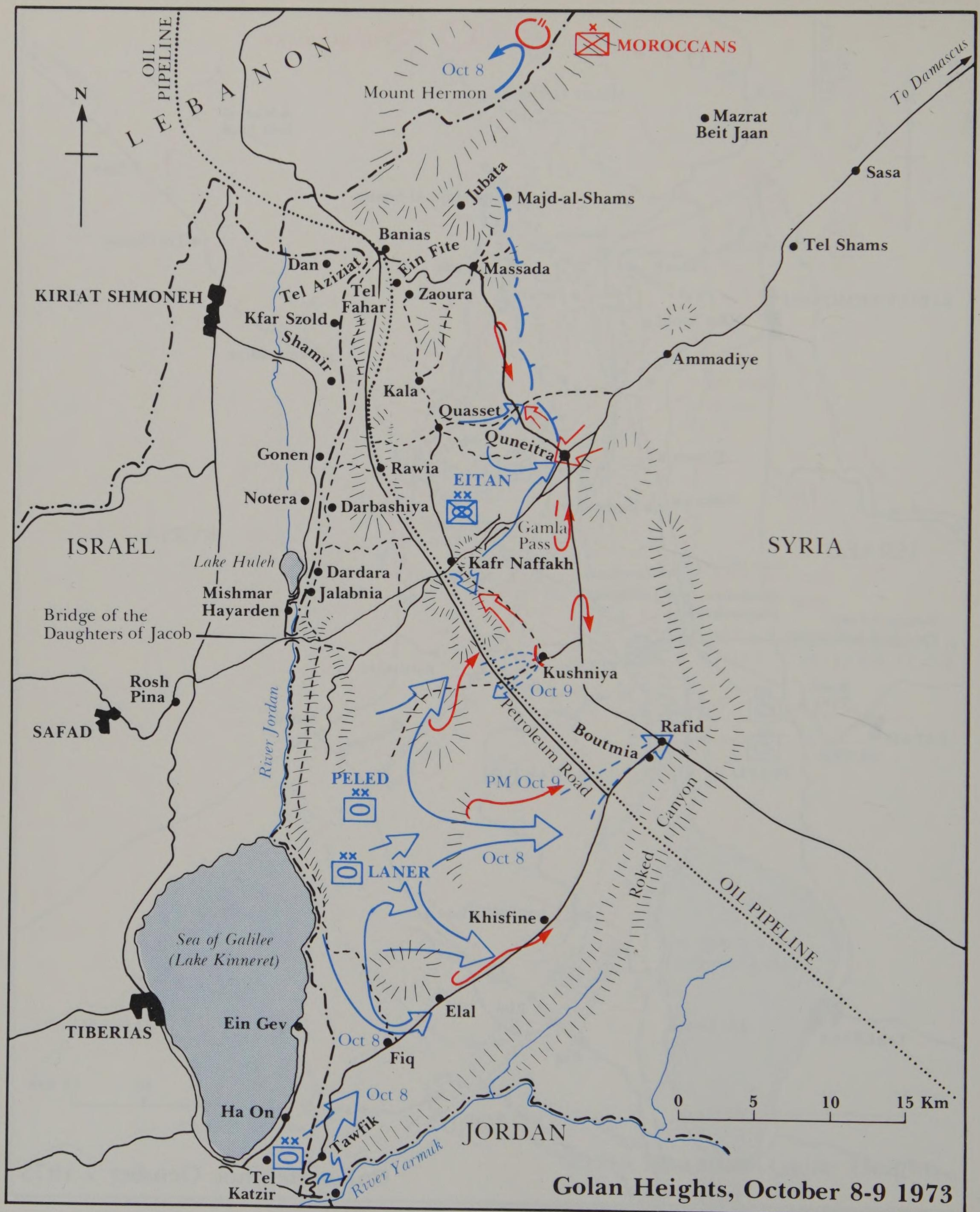
Der'a



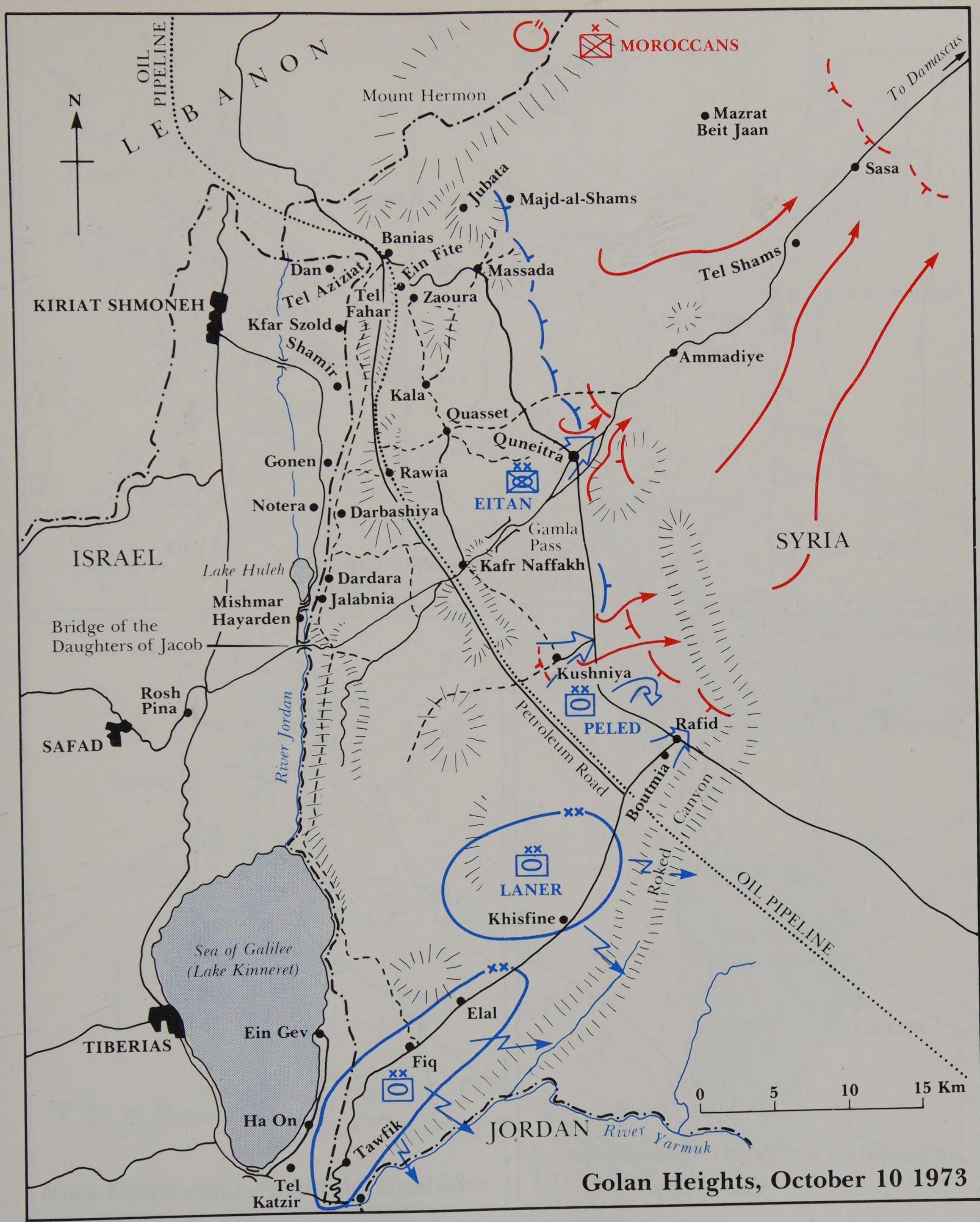
Syrian assault — Golan Heights, October 6 1973



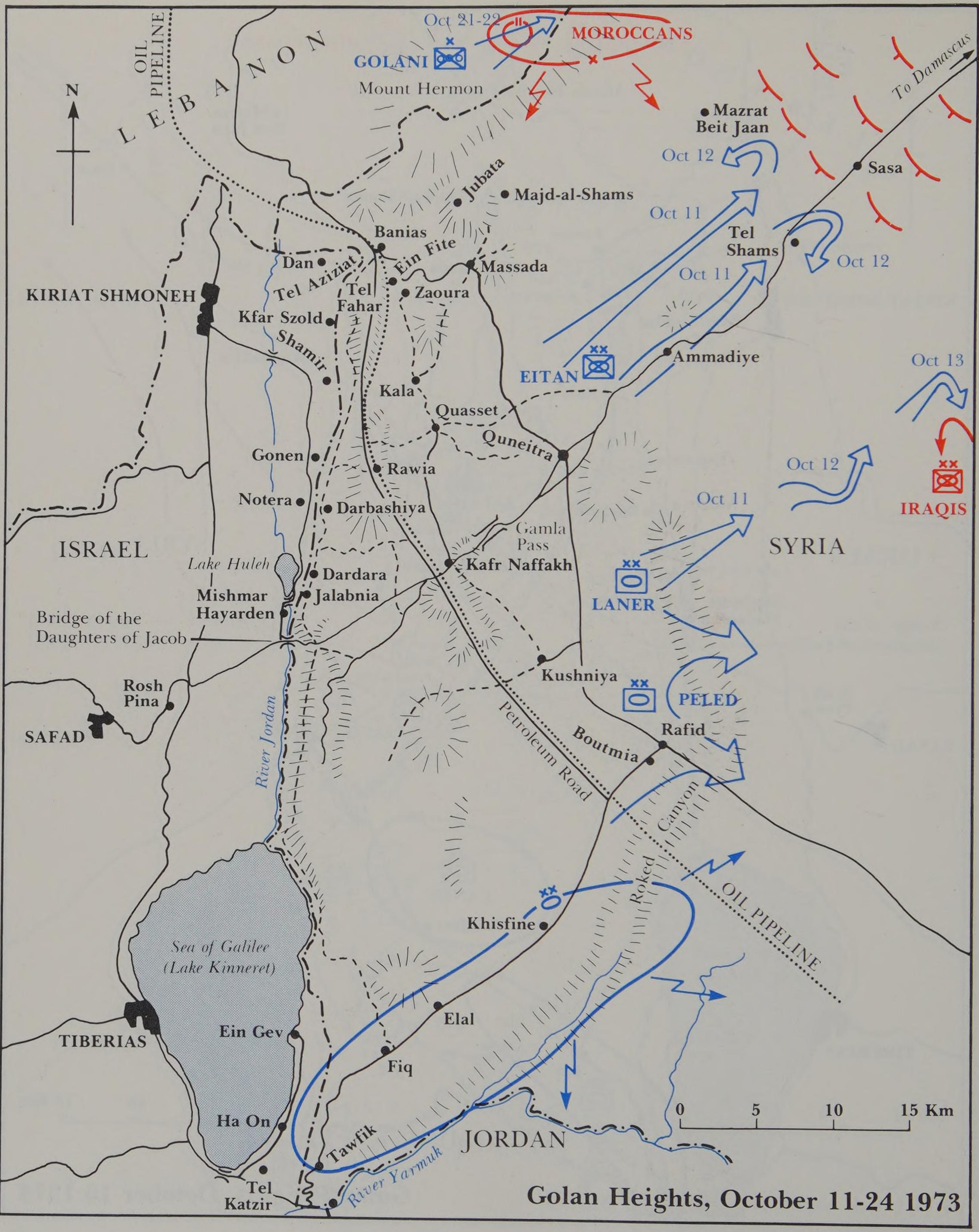
Golan Heights, October 7 1973



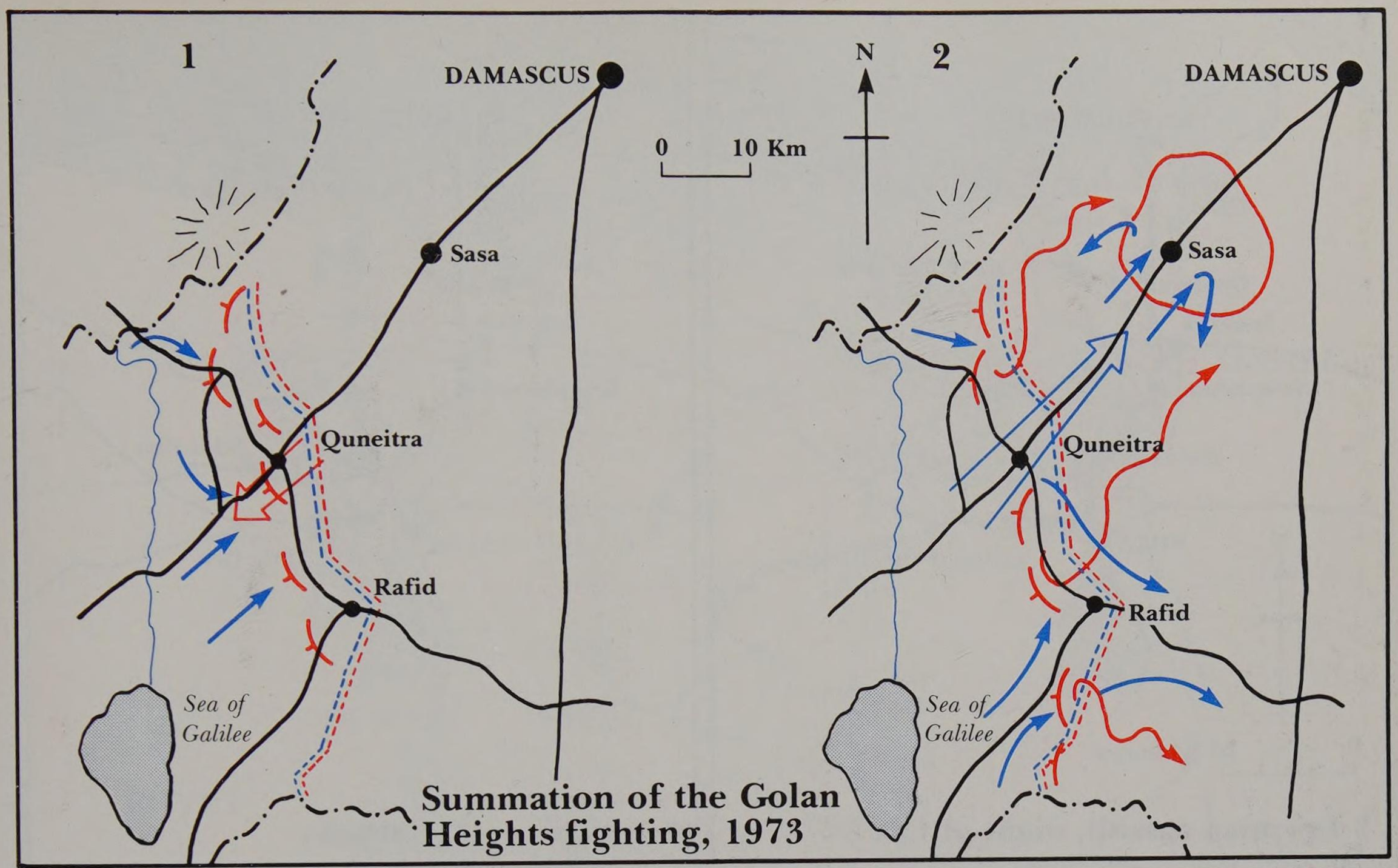
Golan Heights, October 8-9 1973



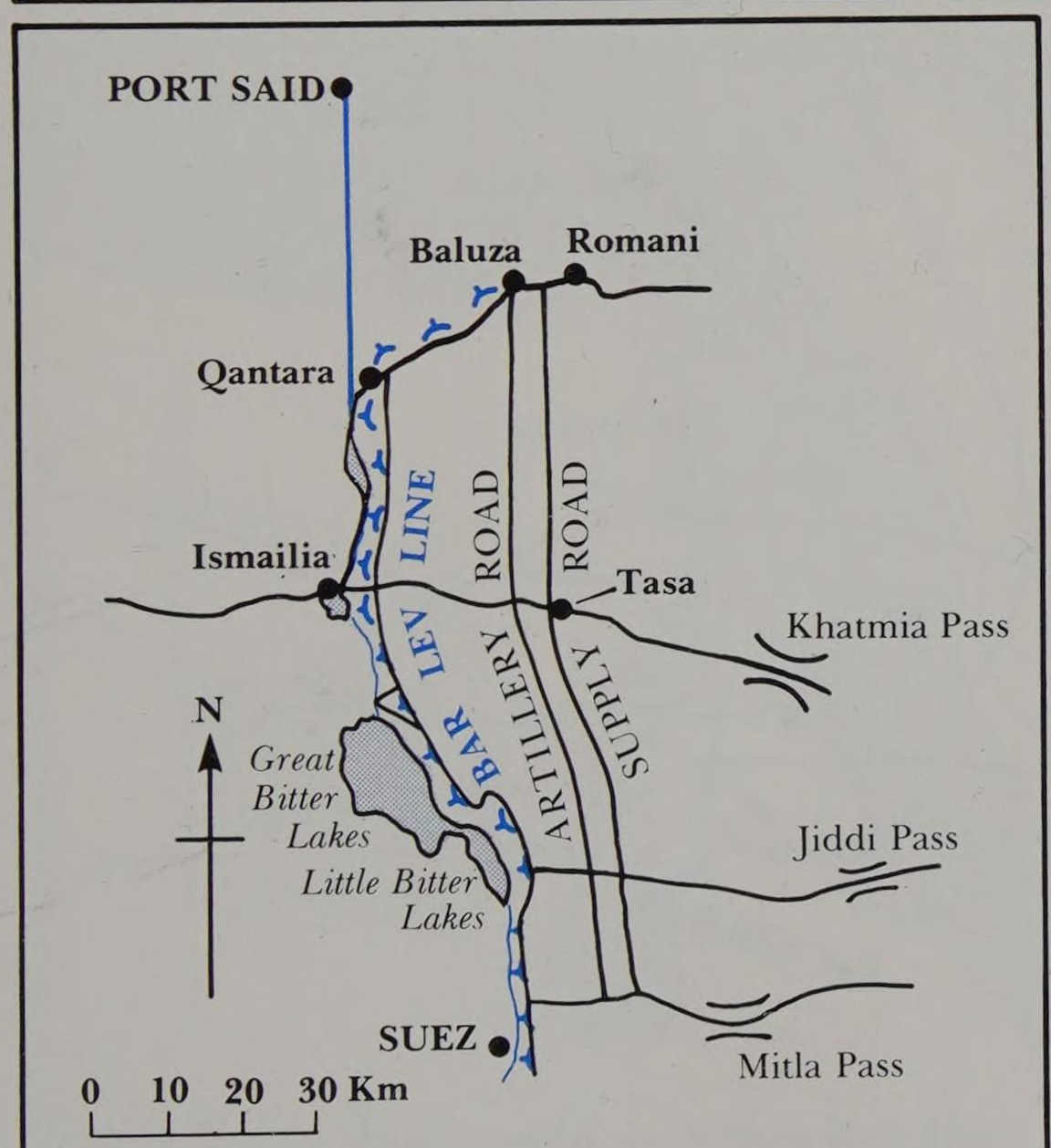
Golan Heights, October 10 1973



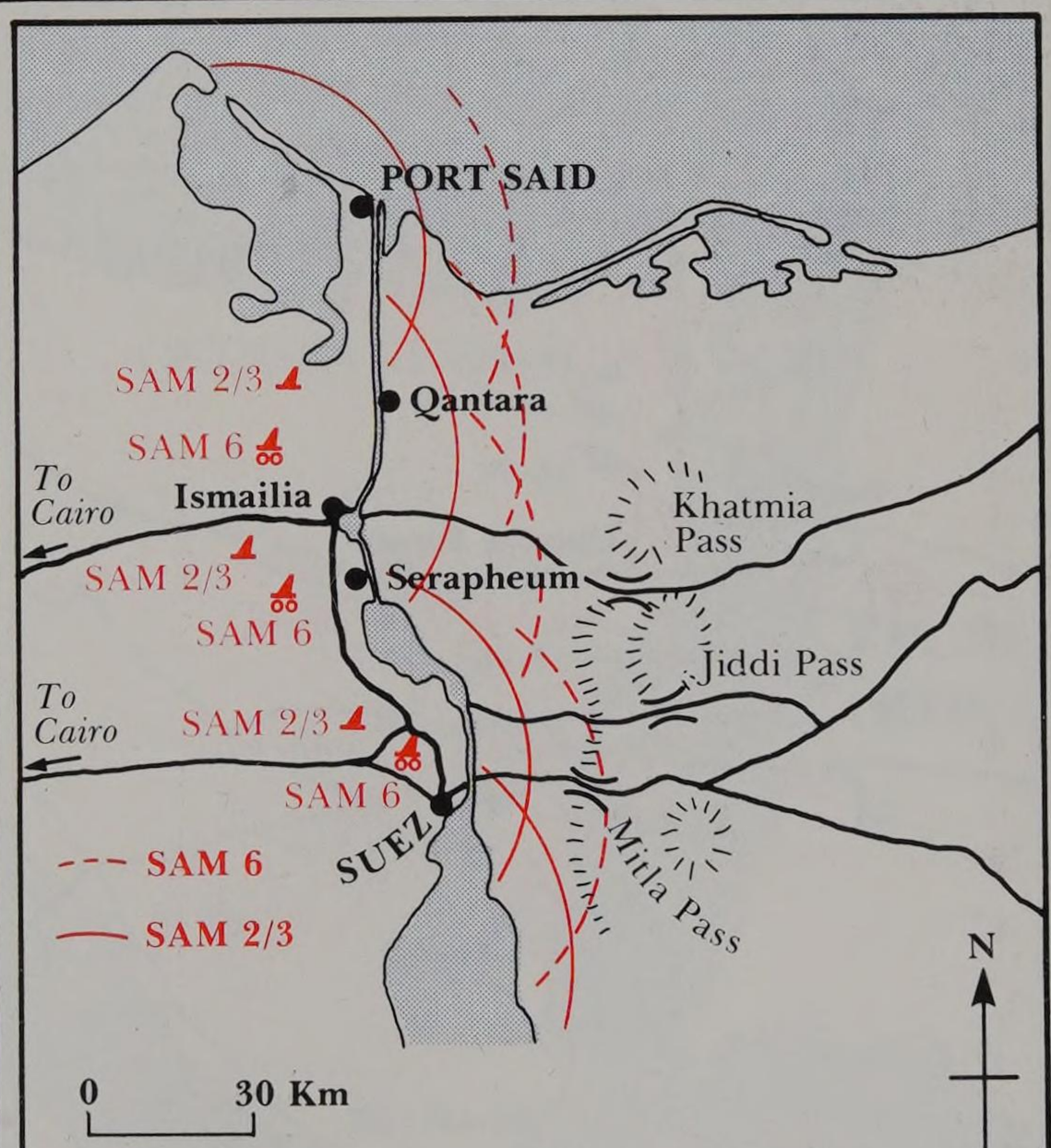
Golan Heights, October 11-24 1973



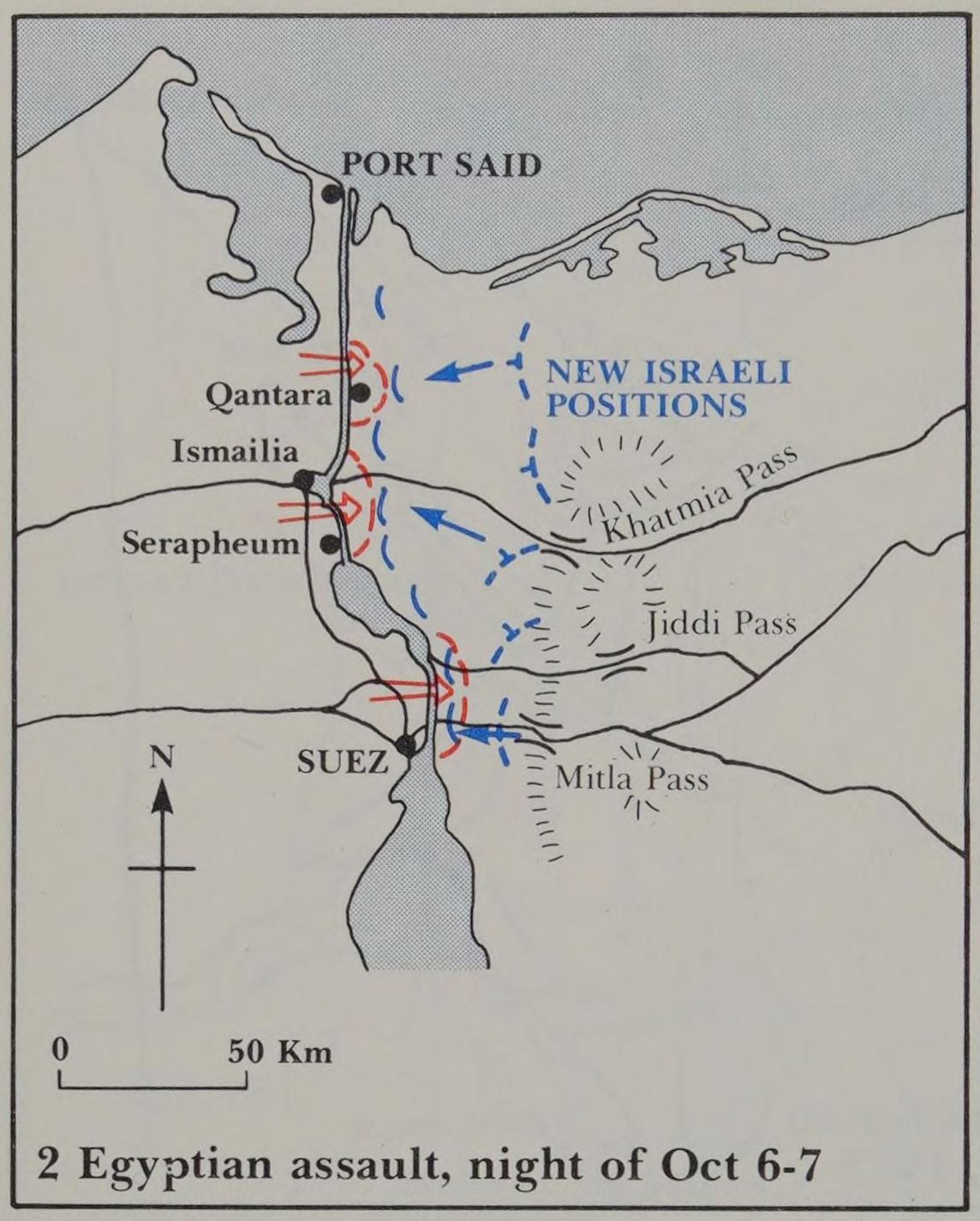
Summation of the Golan Heights fighting, 1973



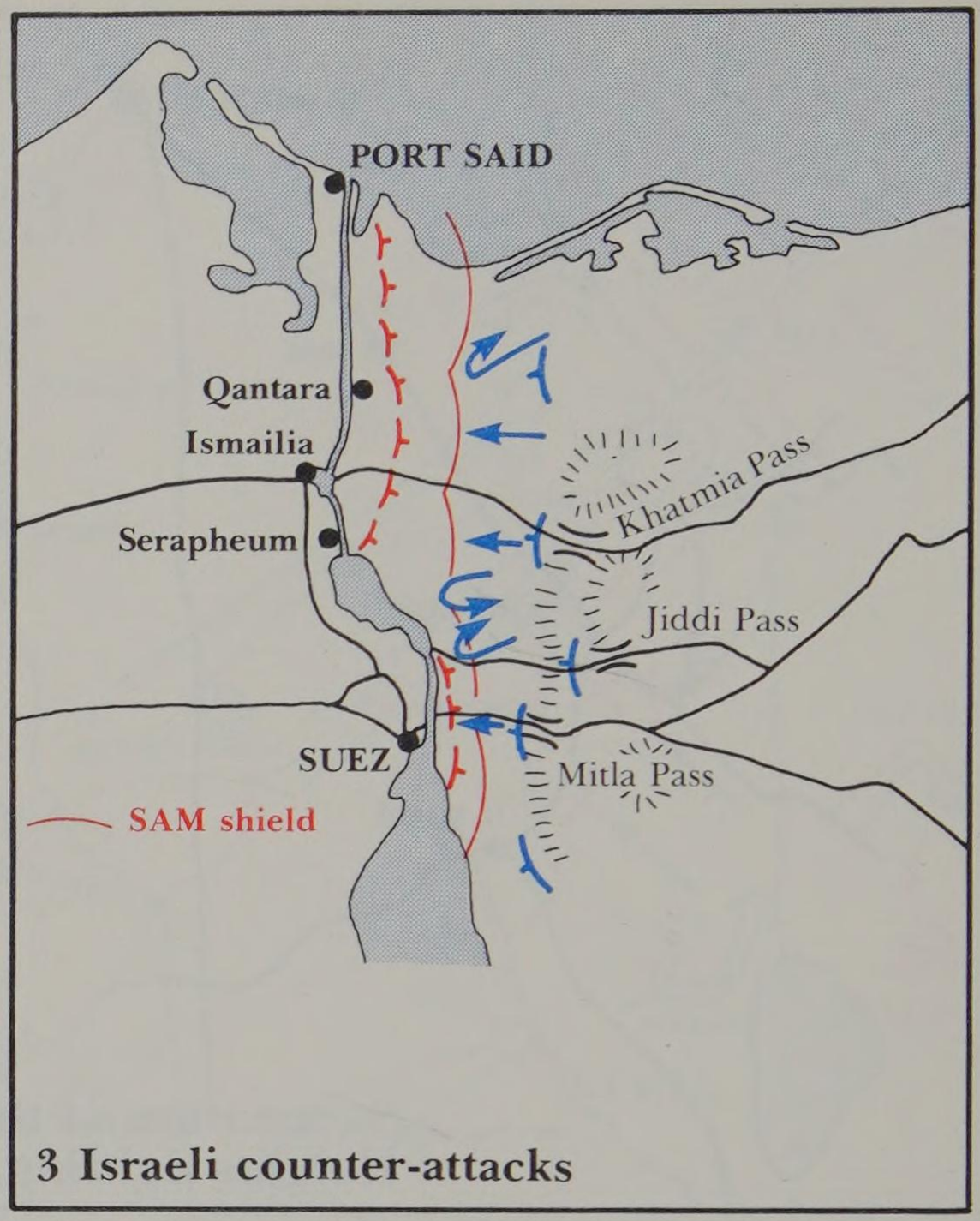
Suez Canal 1973 — the Bar Lev Line



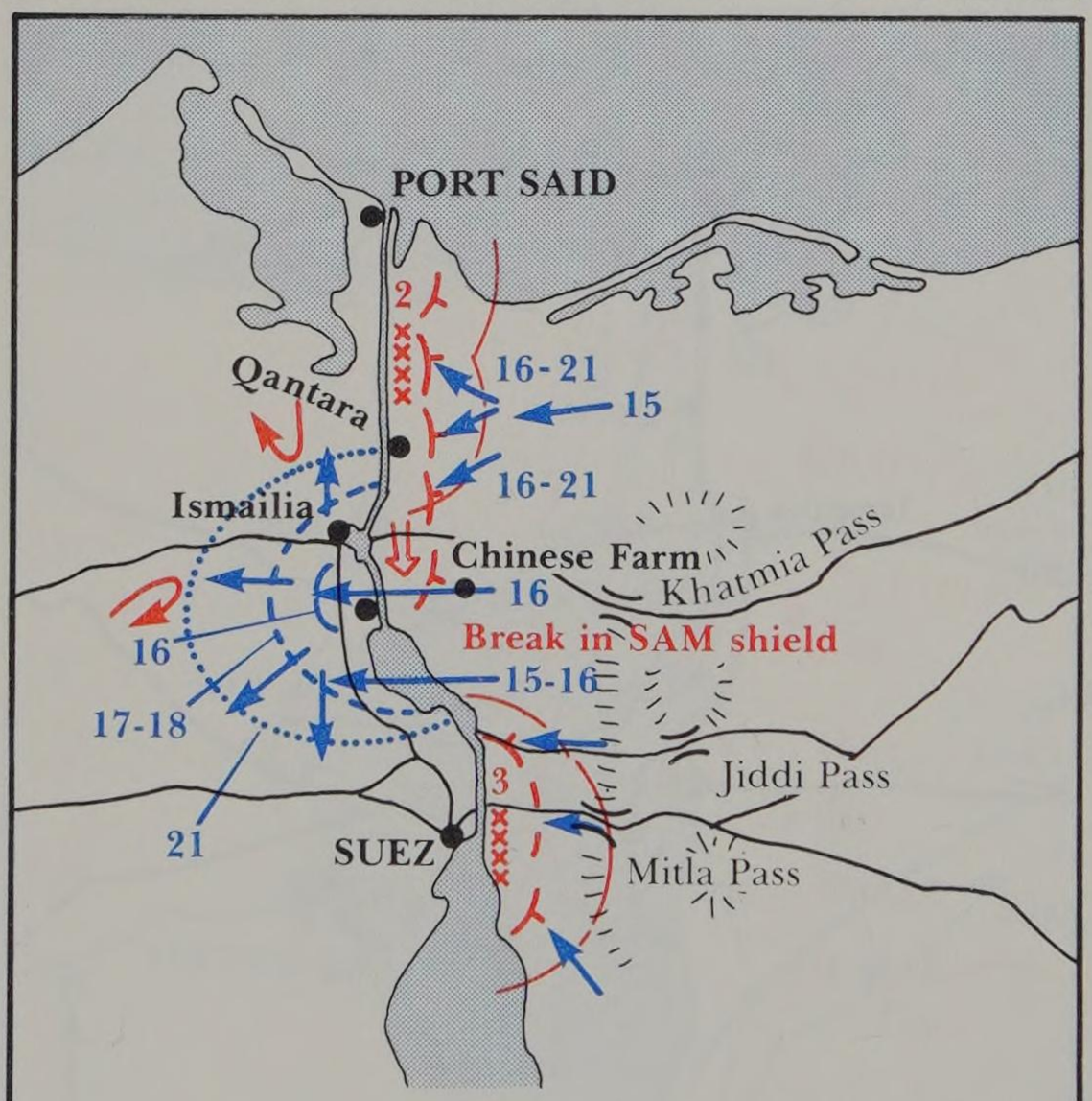
Summation of the Sinai Campaign 1973—1 Yom Kippur



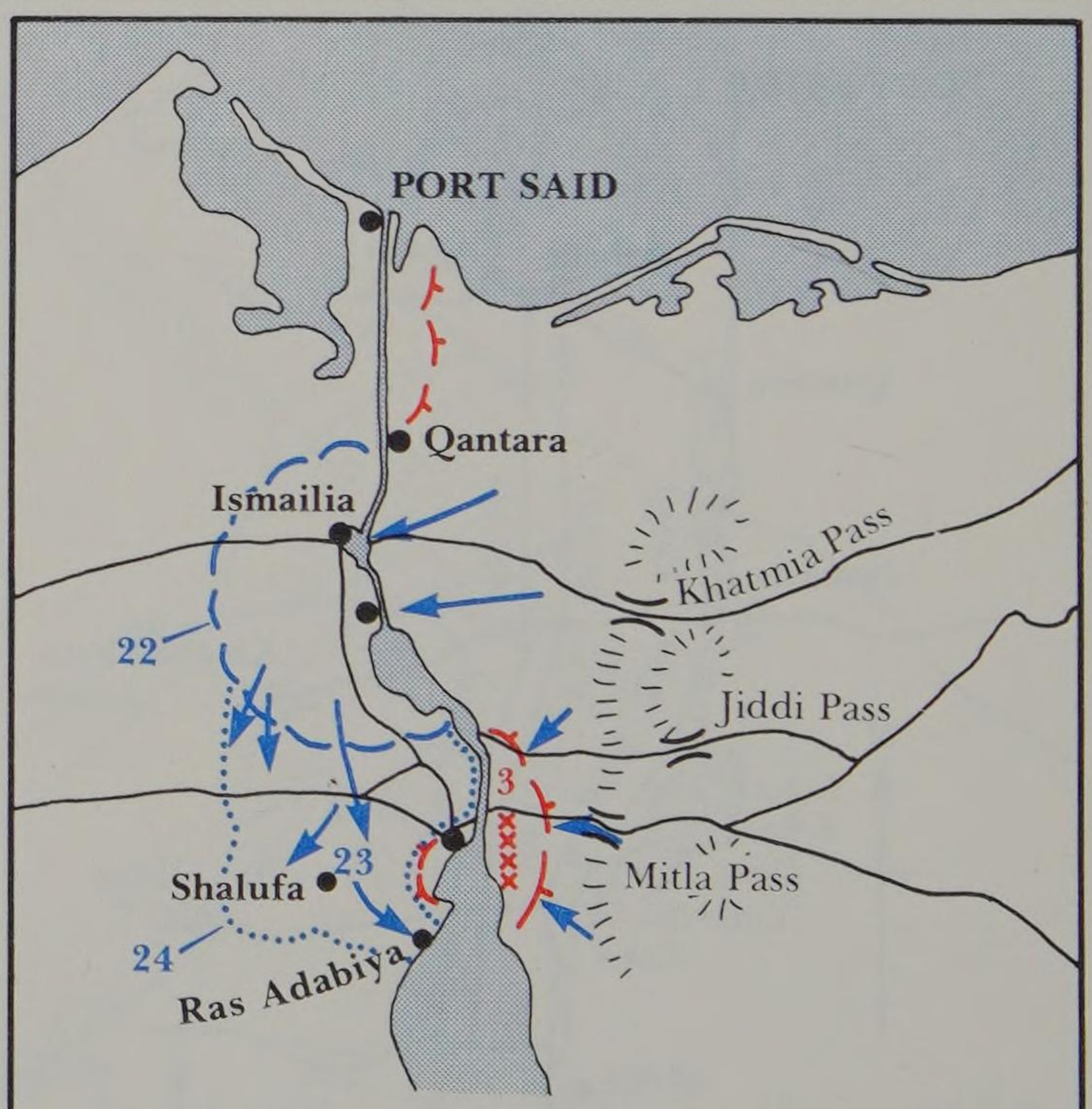
2 Egyptian assault, night of Oct 6-7



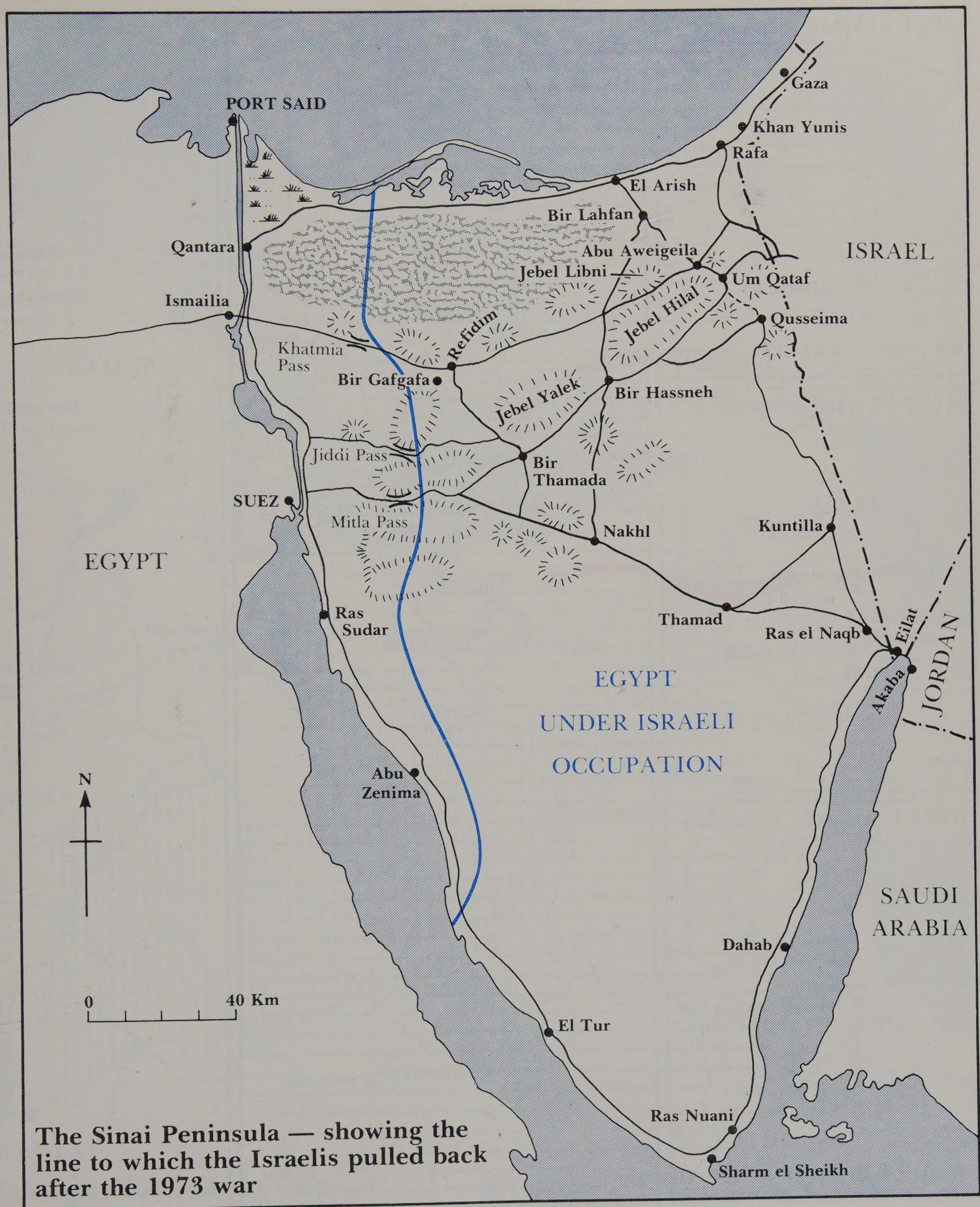
3 Israeli counter-attacks



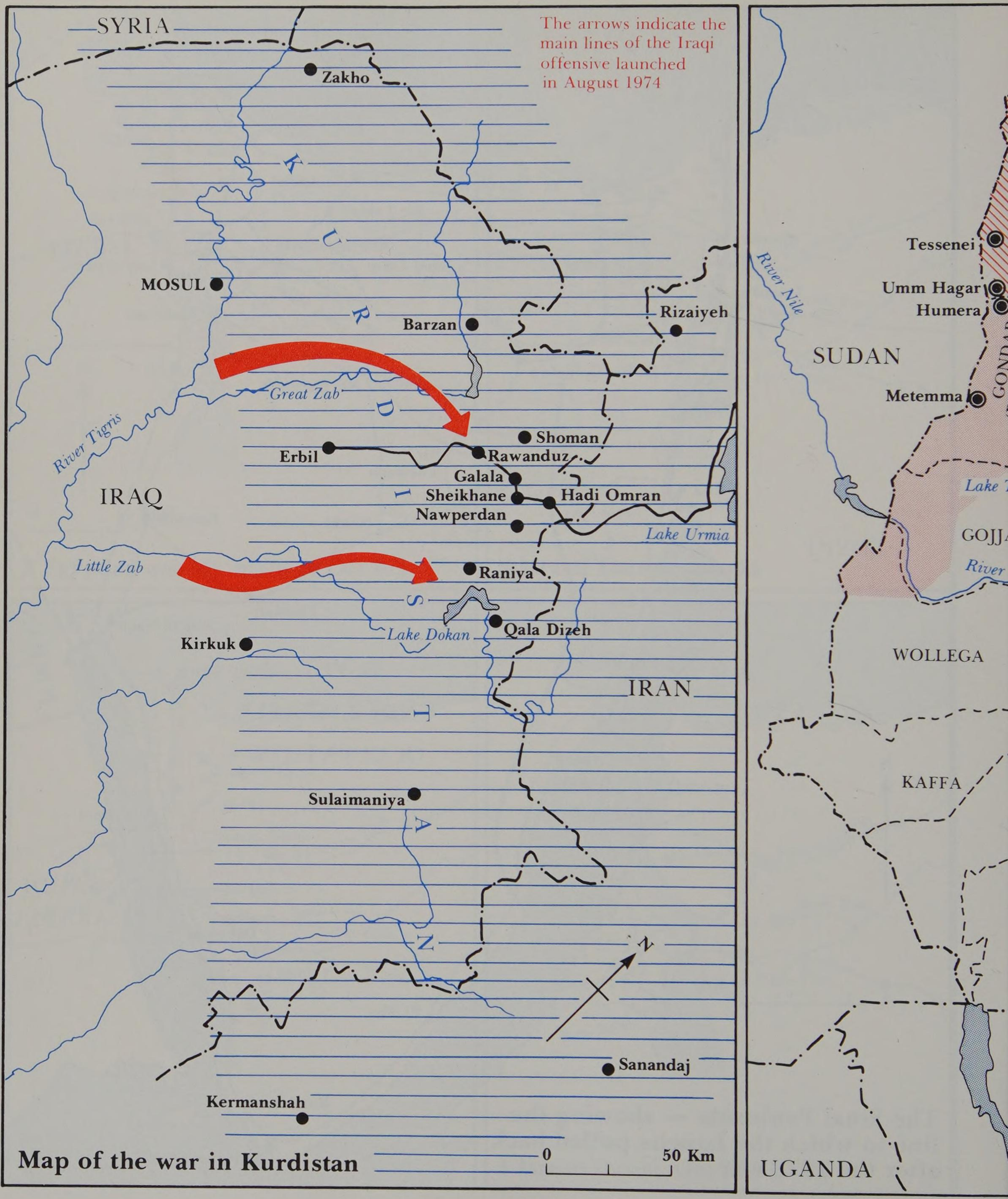
4 Israeli thrust, Oct 15-21



5 Israeli thrust, Oct 22-24



The Sinai Peninsula — showing the line to which the Israelis pulled back after the 1973 war


SYRIA
The arrows indicate the main lines of the Iraqi offensive launched in August 1974
Zakho
K
U
MOSUL
R
Barzan
Rizaiyeh
Great Zab
D
River Tigris
Shoman
Erbil
Rawanduz
Galala
IRAQ
I
Sheikhane
Hadi Omran
Nawperdan
Lake Urmia
Little Zab
Raniya
S
Lake Dokan
Qala Dizeh
Kirkuk
IRAN
T
Sulaimaniya
A
Z
N
Sanandaj
Kermanshah
0
50 Km
Map of the war in Kurdistan
River Nile
Tessenei
Umm Hagar
Humera
SUDAN
Metemma
GOJJA
River
WOLLEGA
KAFFA
UGANDA

Operational areas of guerilla groups

N

ELF
EPLF
ELF/PLF
EDU
Main towns guerillas claimed to hold, July 1977
Afar territory
Somali insurgents

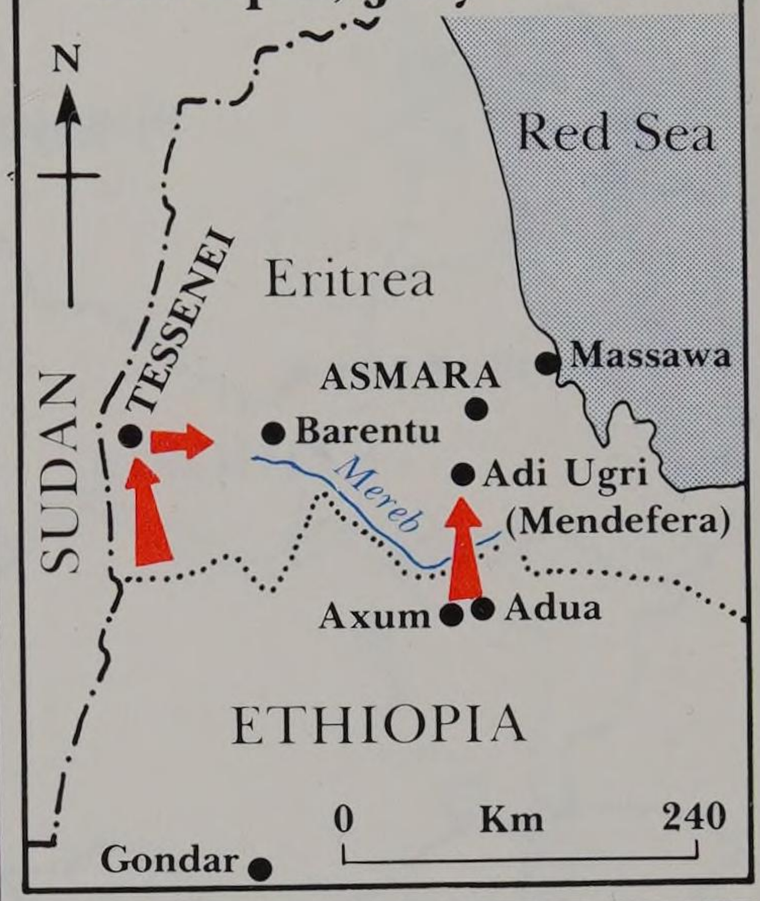
0 400 Km

Keroka
Nakfa
Afabet
Keren
Massawa
ordat
mara
ntu
Dersa
ERITREA
Red Sea
TIGRE
at
ndar
Assab
Gulf of Aden
WOLLO
Djibouti
Zeyla
Aysha
Berbera
Diredawa
Hargeisa
SOMALIA
H I O P I A
DDIS
BABA
Harar
Jijiga
SHOA
HARAR
OGADEN
BALE
SIDAMO
Moyale
KENYA
River Juba
River Webbe Shibeli
SOMALIA
Mogadishu

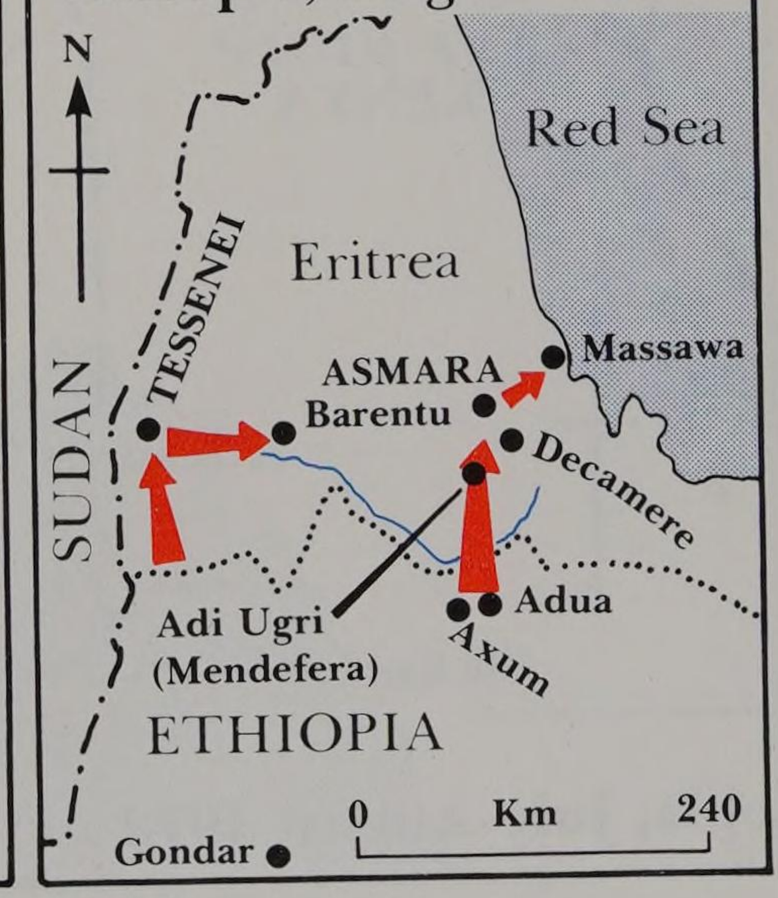
Ethiopia, July 18 1978



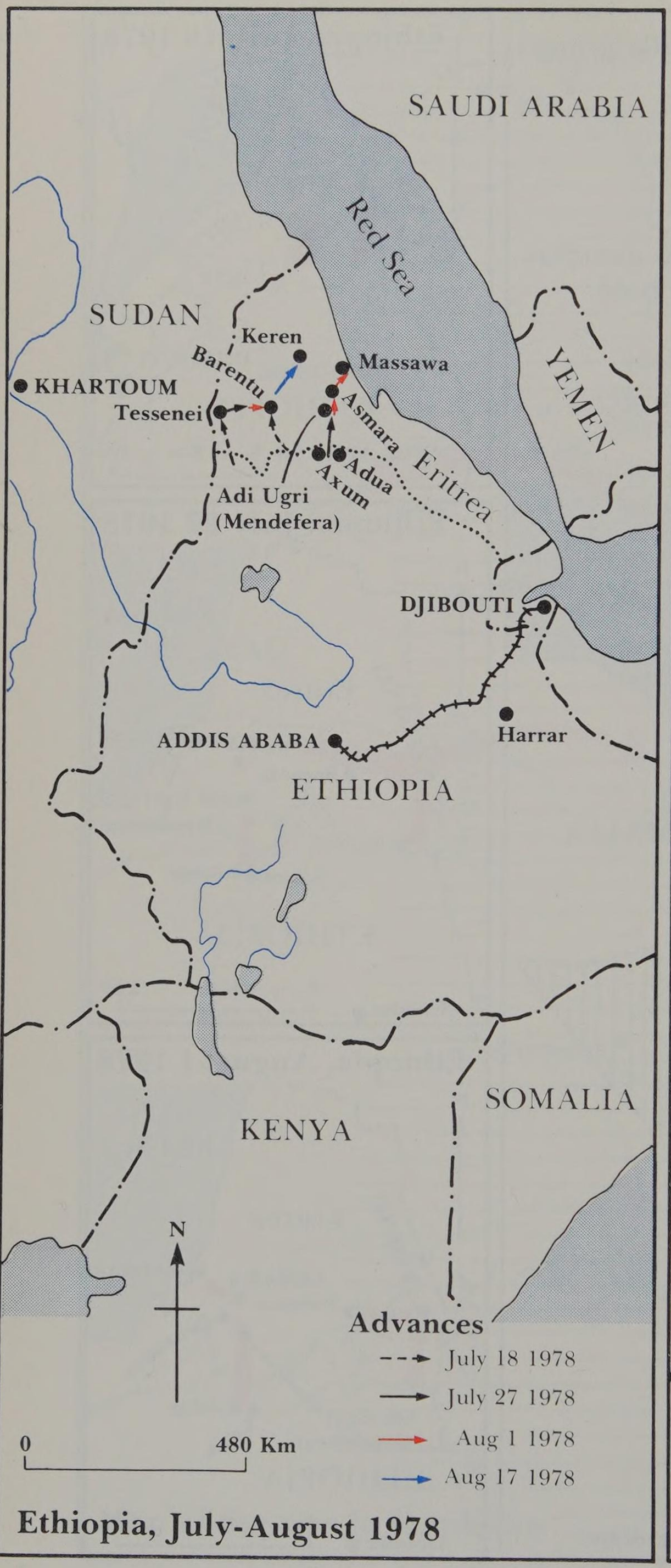
Ethiopia, July 27 1978



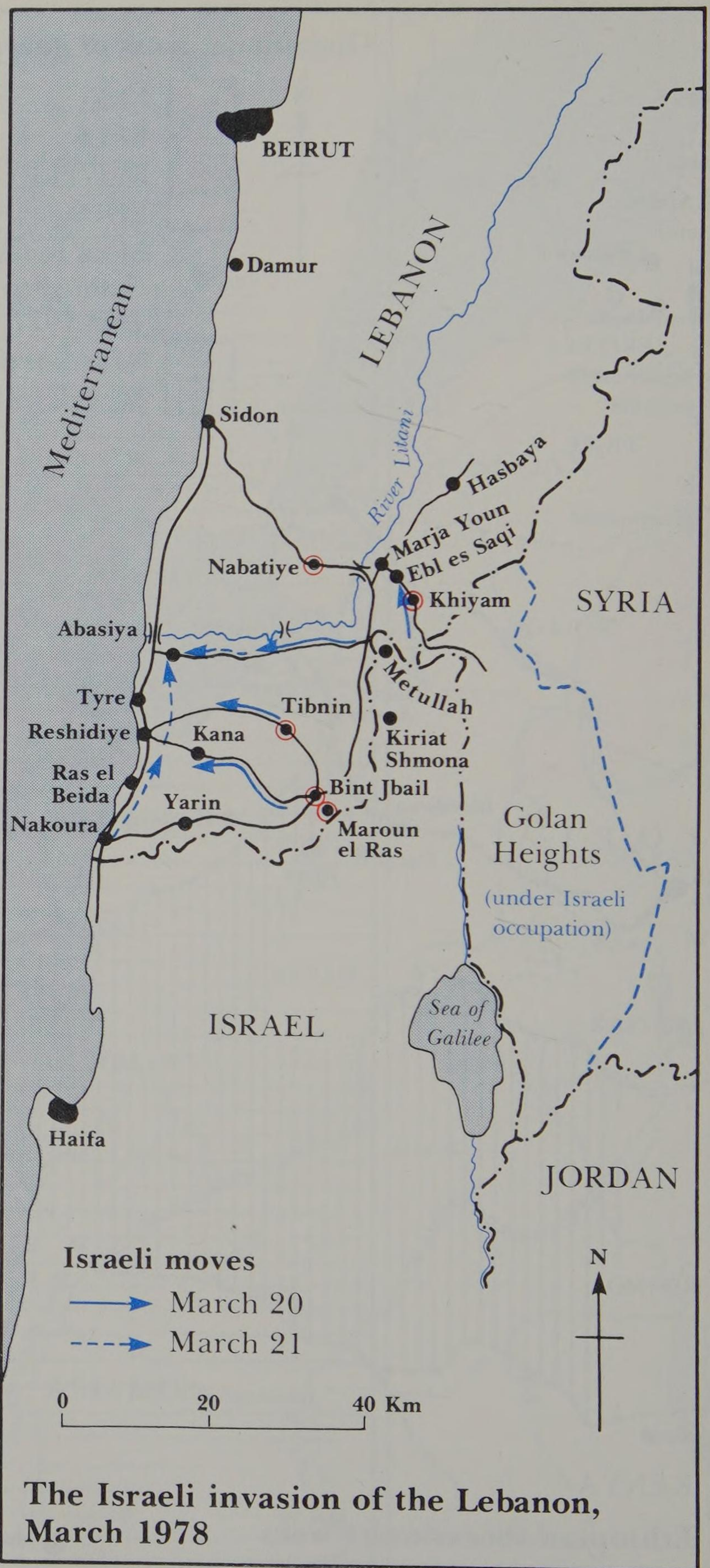
Ethiopia, August 1 1978



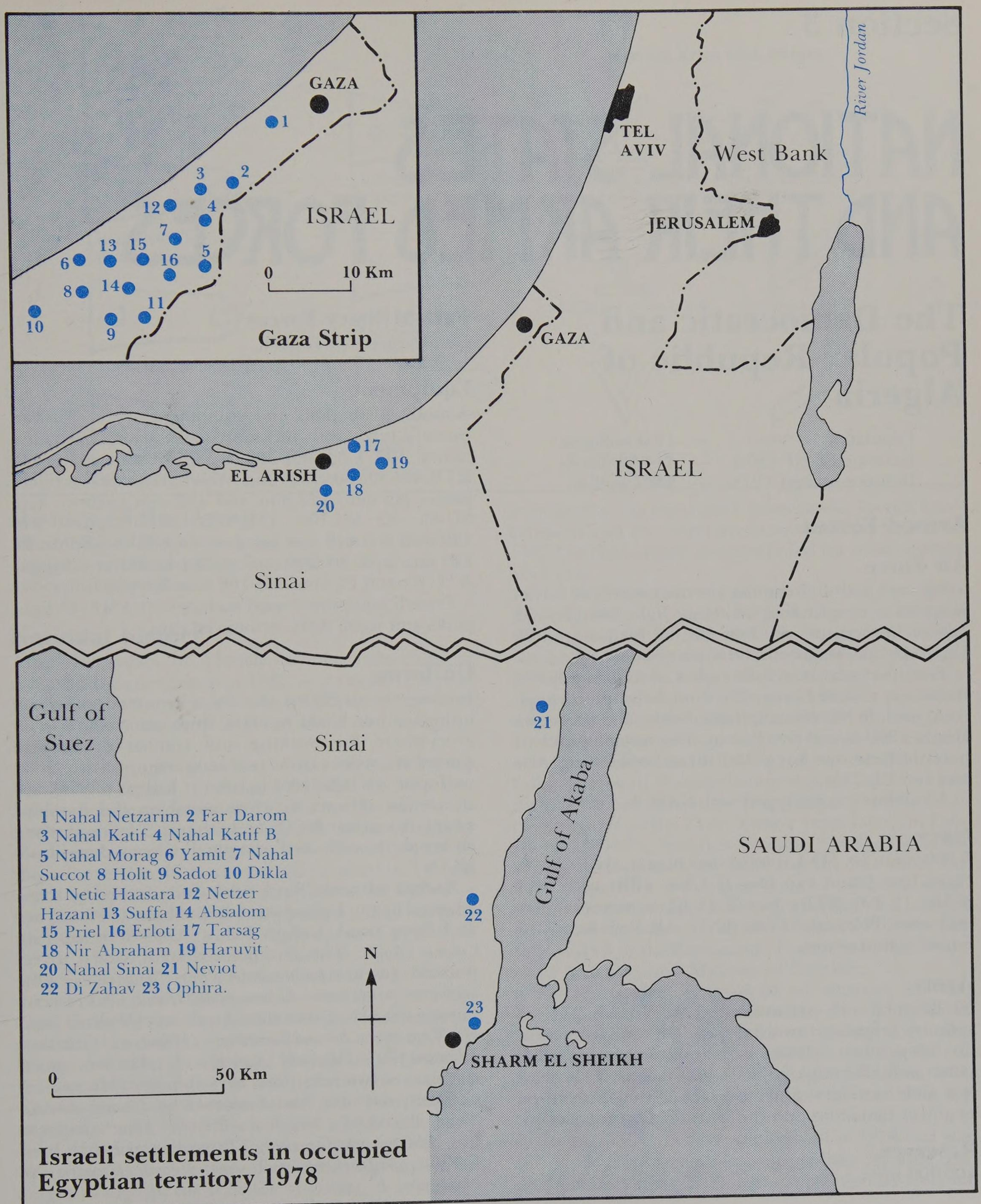
Ethiopian secessionist wars



Ethiopia, July-August 1978



The Israeli invasion of the Lebanon, March 1978



1 Nahal Netzarim **2** Far Darom **3** Nahal Katif **4** Nahal Katif B **5** Nahal Morag **6** Yamit **7** Nahal Succot **8** Holit **9** Sadot **10** Dikla **11** Netic Haasara **12** Netzer Hazani **13** Suffa **14** Absalom **15** Priel **16** Erloti **17** Tarsag **18** Nir Abraham **19** Haruvit **20** Nahal Sinai **21** Neviot **22** Di Zahav **23** Ophira.

Israeli settlements in occupied Egyptian territory 1978

Section 3

NATIONAL STATES AND THEIR ARMED FORCES

The Democratic and Popular Republic of Algeria

Population	—	17.9 million
Estimated GNP 1976	—	$14.5 billion
Defence budget 1975	—	$387 million

Armed Forces

Air Force
5,000 men with 177 combat aircraft (mainly of Soviet manufacture) including 24 *Beagle* light bombers, 35 *Fishbed* interceptors, 20 *Fitter As,* 50 *Frescoes* and 20 *Fagots* and 28 Magister COIN planes.

Transport planes include eight *Cub As,* seven F-27s, four *Coots* and 12 *Crates.* The four helicopter squadrons include 42 *Hounds,* four *Hooks,* five *Hips,* six Hughes 269As and five Pumas. The helicopter transports include one King Air, three Super King Airs and two CL-215s.

AA defence is equipped with SAM 2s.

Navy
3,800 men; six SO-1 submarine chasers, six Komars; three Osa I and two Oso II Class FPBs with Styx SSMs; 12 P-6 MTBs; two T-43 Class minesweepers and one 'Polnocny' Class LST. All vessels are of Soviet manufacture.

Army
67,000 men with one armoured and four motorised infantry brigades, three independent tank battalions, 50 independent infantry battalions, a parachute battalion and 12 companies of desert troops. There are ten field artillery and five AA battalions, three engineer battalions and the usual logistic services.

Reserves
100,000 men.

Para-Military Forces
Gendarmerie — 10,000.

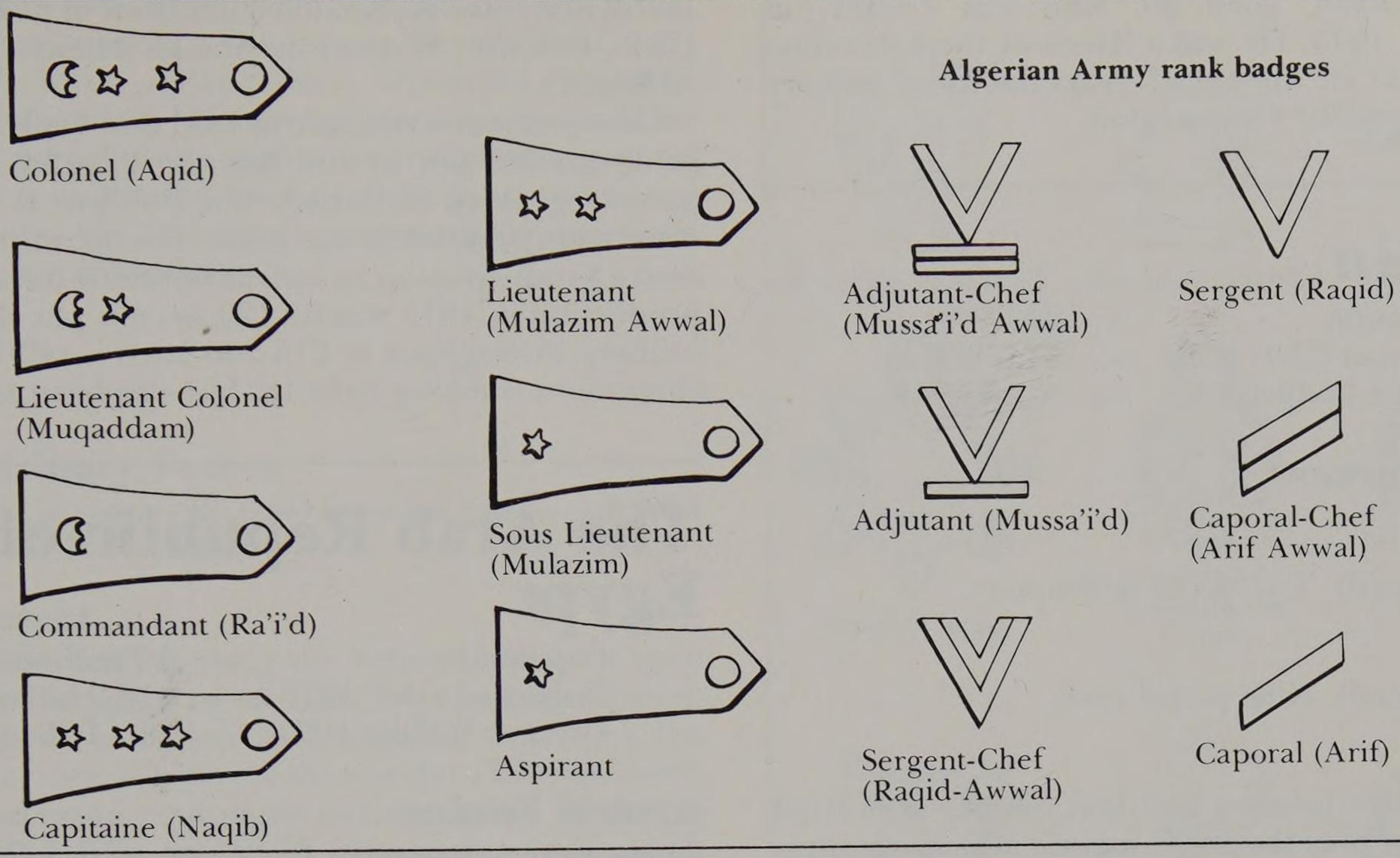
Equipment
Almost all weapons and equipment are of Russian manufacture and include small arms, grenades, mines, 100 T-34 and 300 T-54/55 battle tanks, 440 BTR-40/-50/-60/-152s and 'Walid' APCs. 600 artillery pieces (85 mm, 122 mm and 152 mm calibre). Five SU-85, 85 SU-100, ISU-122/-152 SP guns, 240 120 mm and 240 mm mortars; 14 FROG-4 SSMs, 20 140 mm and 40 240 mm rocket launchers, Sagger ATGWs and 85 mm and 100 mm AA guns.

French equipment used includes 50 AMX-13 light tanks and some AML armoured cars.

Uniforms
Initially the uniforms showed a very strong French influence but khaki or olive drab can now be seen everywhere for working and combat dress, with American style canvas webbing equipment. Dress uniforms are light grey in colour; badges of rank are shown for officers in white metal on the shoulder straps, for senior NCOs on both upper arms in white embroidery with red diagonal stripes for junior NCOs.

Badges of rank: Rank titles were revised to those adopted by the United Arab Republic in 1969 and are as follows (rank badges follow Arab designations): *Colonel (Aqid):* Two five-pointed stars over a three-pointed crescent. *Lieutenant-Colonel (Muqaddam):* One star over a crescent. *Commandant (Raid):* A crescent. *Captain (Naqib):* Three stars. *Lieutenant (Mulazim awwal):* Two stars. *Second-Lieutenant (Mulazim):* One star. *Adjutant-Chef (Mussaid awwal):* A chevron, point down, over two horizontal bars. *Adjutant (Mussaid):* A chevron over one bar. *Sergeant-Chef (Raqid awwal):* Two chevrons. *Sergeant (Raqid):* One chevron. *Caporal-Chef (Arif awwal):* Two diagonal red bars. *Caporal (Arif):* One such bar. *Private (Jundi):* No badges.

Algerian Army rank badges



History of the Army

After independence the Army was formed from an amalgam of the old French colonial troops and the nationalist guerrillas.

National history

After 130 years of French colonial rule, Algeria achieved independence in 1962 as a result of a prolonged and bitter struggle which inflicted wounds on France almost as deep as those suffered by Algeria herself.

Nationalist aspirations had been awakened during World War 2 and on August 5 1951 the Algerian National Liberation Front (FLN) was founded; on November 1 1954 open warfare was declared against the French administration and the French Army in the country. The FLN was partially trained in Tunisia and it co-operated with the local liberation forces — the 'internal maquis'. By September 1958 a Free Algerian Government was formed in Cairo with Ferhat Abbas as Provisional President.

President de Gaulle saw the depth of the rift between France and Algeria and decided to try to withdraw from the colony as decently and painlessly as possible. He held a referendum in metropolitan France and Algeria on the self-determination issue on January 6-8 1961 and in both places the majority voted for breaking the colonial ties. The outcome was unpopular with the French Army which had many debts of blood to pay in Algeria and certain officers set up the OAS, an anti-Gaullist terrorist group which sought to disrupt the transfer of power. A cease-fire agreement was concluded between the French Government and the Algerian nationalists on March 18 1962 but OAS terror acts continued for some months after this.

The Algerian provisional executive was set up on April 7 1962, de Gaulle declared Algerian independence on July 3 1962 and on September 25 the National Assembly met and elected Ferhat Abbas as President and Ben Bella as Prime Minister of the new republic. As is usual in emergent states, a period of dynamic political development followed and on June 15 1965 the government was overthrown by a group of Army officers and a Revolutionary Council under Colonel Houari Boumedienne was set up. Boumedienne had attended the Cairo military academy as chief of staff of the FLN. Twelve years later, on February 25 1977, the first elections to the National People's Assembly were held and the 261 members were elected for a five-year term of office. Boumedienne, however, kept a firm grip on all vital tools of power and is currently Prime Minister, President of the Council of the Revolution, President of the Council of Ministers and Minister of Defence.

Algeria is deeply involved in support for the Polisario front guerilla actions in the old Spanish Sahara and has become a haven for terrorists and skyjackers from all over the world.

Head of the armed forces is the President who works through the Minister of Defence and then the chief of the general staff.

Boumedienne became critically ill in 1978 and was not expected to remain in active politics for long. He died on December 27 and was succeeded by Colonel

Benjedid Chadli, aged 50, who was elected on January 31, 1979. He was a 'Hero of the Liberation Struggle' and for the last 13 years had been military commander of the Oran region.

Bahrain

Population	—	270,000
Estimated GNP 1976	—	$1.6 billion
Defence budget 1977	—	Not known

Armed Forces

Air Force
(Police manned). Two Scout helicopters.

Navy
(Police manned). Nine patrol craft.

Army
2,300 men. One infantry battalion and one armoured car squadron plus the usual logistic and administrative services.

Reserves
Not known.

Para-military Forces
Defence and security troops — 60,000.

Equipment
NATO small arms; six 81 mm mortars, six 120 mm recoilless (anti-tank) rifles, eight Ferret scout cars, eight Saladin armoured cars.

Army uniforms
Berets (khaki or black), khaki shirt and trousers, black boots, olive web equipment. Red and white shmarg for parades. British-style rank badges.

History of the Army
No data available.

National history
This tiny Gulf state has been linked to Britain by treaty since 1882. On August 15 1971 Bahrain signed a treaty of friendship with Britain and declared her independence. The Bahrain archipelago has an area of 253 square miles, the population is mainly Moslem Arabs but with many foreign business men and oil engineering experts. The capital is Manama on the island of Bahrain and the current ruler is His Highness Amir Sheikh Isa bin Sulman Al-Khalifa (born 1933, succeeded to the throne on 2 November 1961). His dynasty (the Al-Khalifas) has been in power since 1782. Defence Minister is Sheikh Hamed bin Isa Al-Khalifa.

Oil was discovered there in 1931 and exploitation is being carried out by the Bahrain Petroleum Company (registered in Canada but US-owned) under a concession granted by the Amir. The oil refinery processes Saudi-Arabian as well as domestic oil and local production in 1975 was 61,120 barrels per day, with refinery throughput at 215,500 barrels per day. An aluminium-smelting industry has also been set up.

The Arab Republic of Egypt

Population	—	39 million
Estimated GNP 1976	—	$12.9 billion
Defence budget 1977	—	$4.4 billion

Armed Forces
Three-year conscription for males.

Air Force
25,000 men and about 365 combat aircraft. Twenty-five *Badger* medium bombers (some with Kelt ASMs), five *Beagle* light bombers, 90 *Frescoes* and 80 *Fishbed* interceptors. Eighteen *Flogger Ds,* 60 *Fitter As,* some *Fitter Cs* and 38 Mirage III E FGA planes; 24 *Flogger B* interceptors.

The fixed wing transports include 19 *Cubs,* 30 *Crates,* four C-130s, two EC-130Hs, one Falcon and one Boeing 707 aircraft, while helicopter transports include 12 *Hounds,* 32 *Hooks,* 70 *Hips,* 30 Commandos, 42 Gazelles and six Sea King machines.

Training aircraft include 150 *Fagot/Fishbed/Flogger, Maya* and *Fitter A* planes as well as 40 Gomhouria trainers. France has agreed to supply 40 Mirage F-1s.

Navy
20,000 men. Four ex-Soviet 'Skory' destroyers, one ex-British Z Class destroyer; three ex-British escorts 12 SO-1 ex-Soviet submarine chasers, 12 fast patrol boats (six Osa, six Komar) equipped with Styx SSMs; four P-4, 20 P-6 and six Shershen MTBs; three large patrol craft; 14 ex-Soviet minesweepers (two K8, six T-43, two T-301 and four 'Yurka'); 16 ex-Soviet landing craft (three 'Polnocny', four SMB-1 and nine 'Vydra') and three British SRN-6 hovercraft.

There are 12 ex-Soviet submarines (six W- and six R-Class) with two more on order and ten Sea King anti-submarine helicopters.

Army
300,000 men including 75,000 in the Air Defence

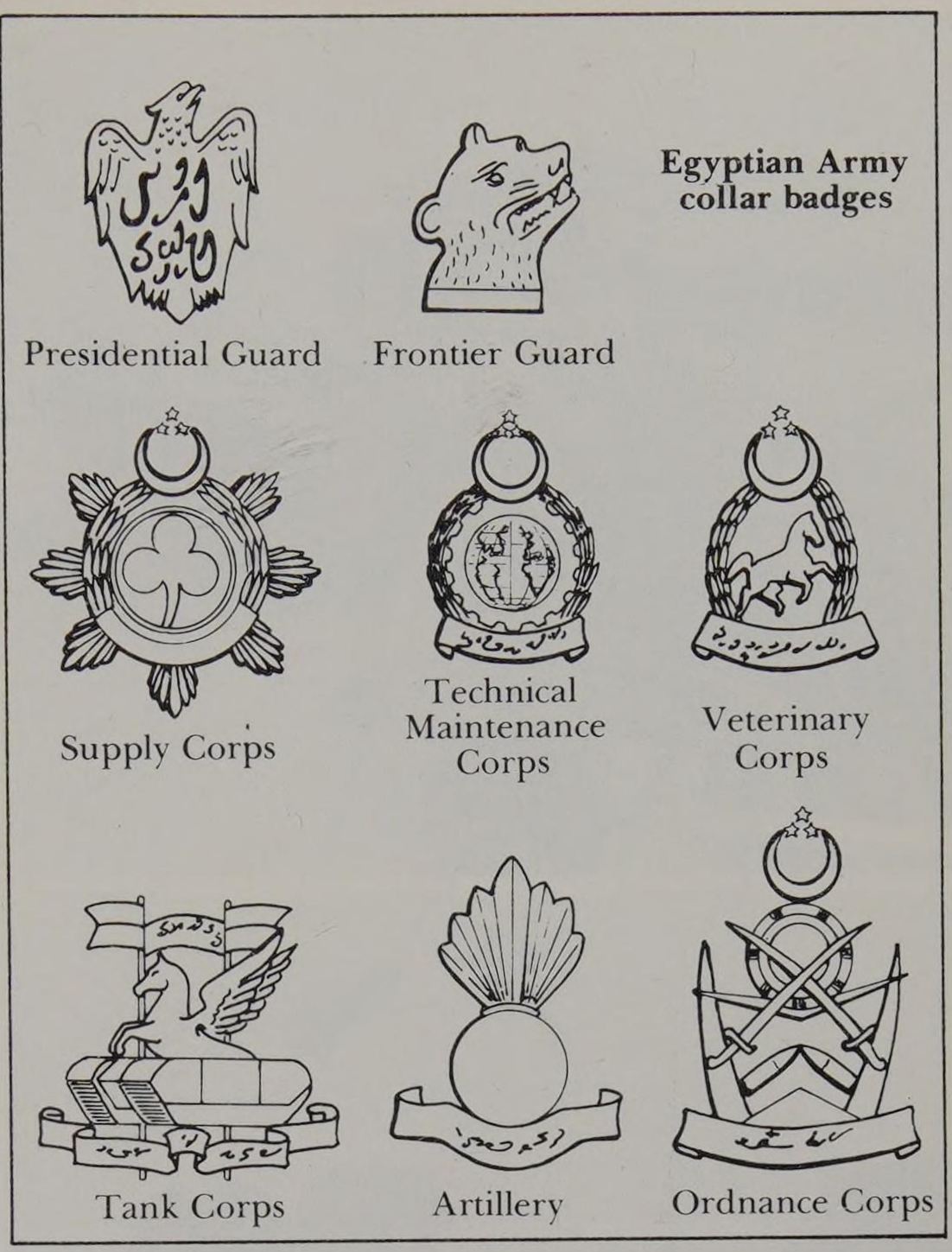
Command. Two armoured, three mechanised infantry and five infantry divisions, one 'Republican Guard Brigade', three independent armoured brigades, seven independent infantry brigades, two air portable and one parachute brigades; six commando groups. Artillery is organised into six field gun, two heavy mortar, one ATGW brigades and two SSM regiments (with 24 Scud missiles).

Reserves
500,000.

Para-Military Forces
National Guards — 20,000; Frontier Corps — 6,000; Coast Guards — 7,000.

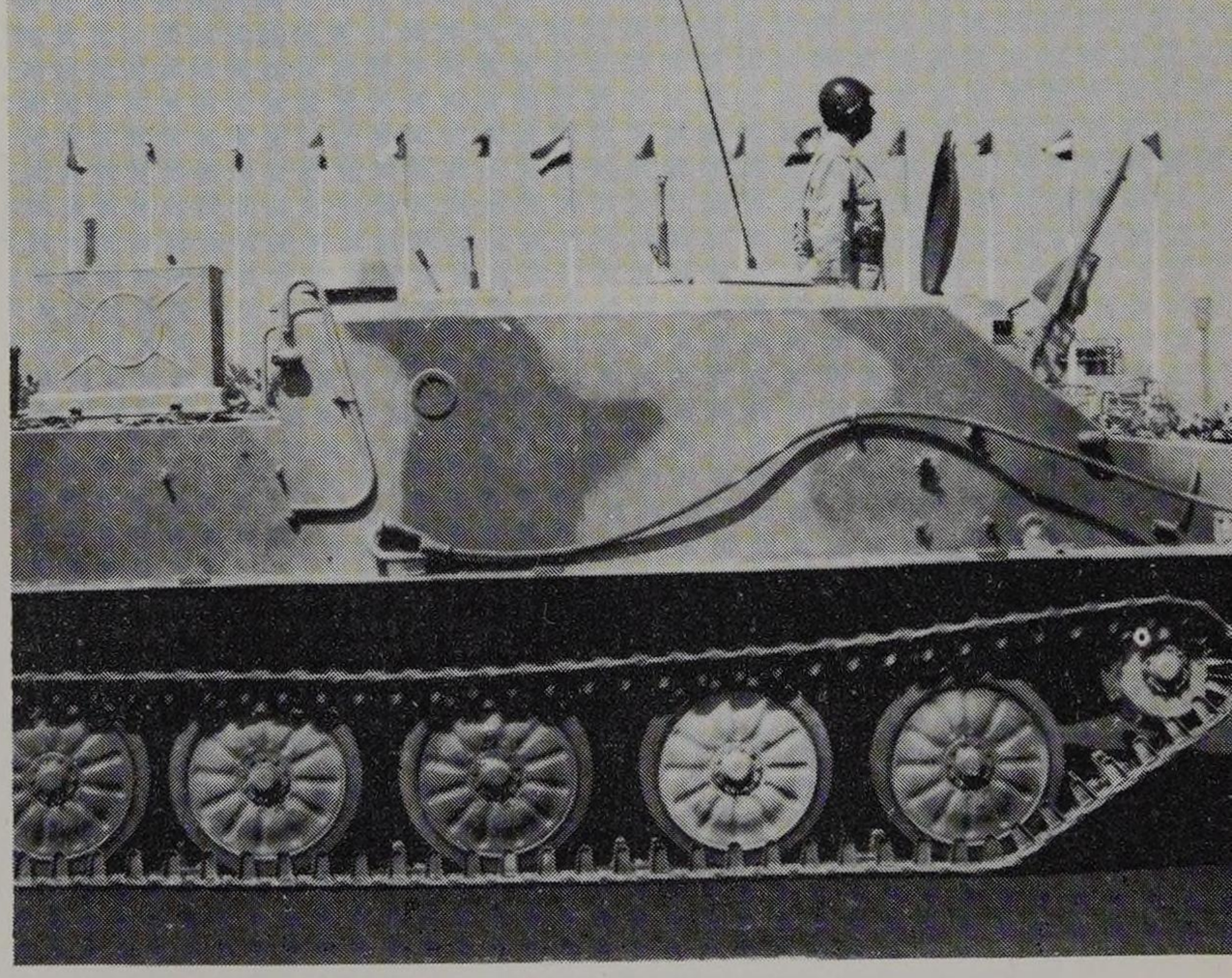
Equipment
From 1954 until recently the Soviet Union has been the major supplier of all arms, equipment, vehicles, weapons, ammunition and engineer stores to the Egyptians. Small arms are the standard Russian Army items and major equipment includes 1,100 T-54/-55s, 750 T-62 MBTs, 80 PT-76 light tanks; 2,500 APCs including OT-62/-64s, BTR-40/-50/-60/-152s and Walids; 200 BMP-76 PB MICVs.

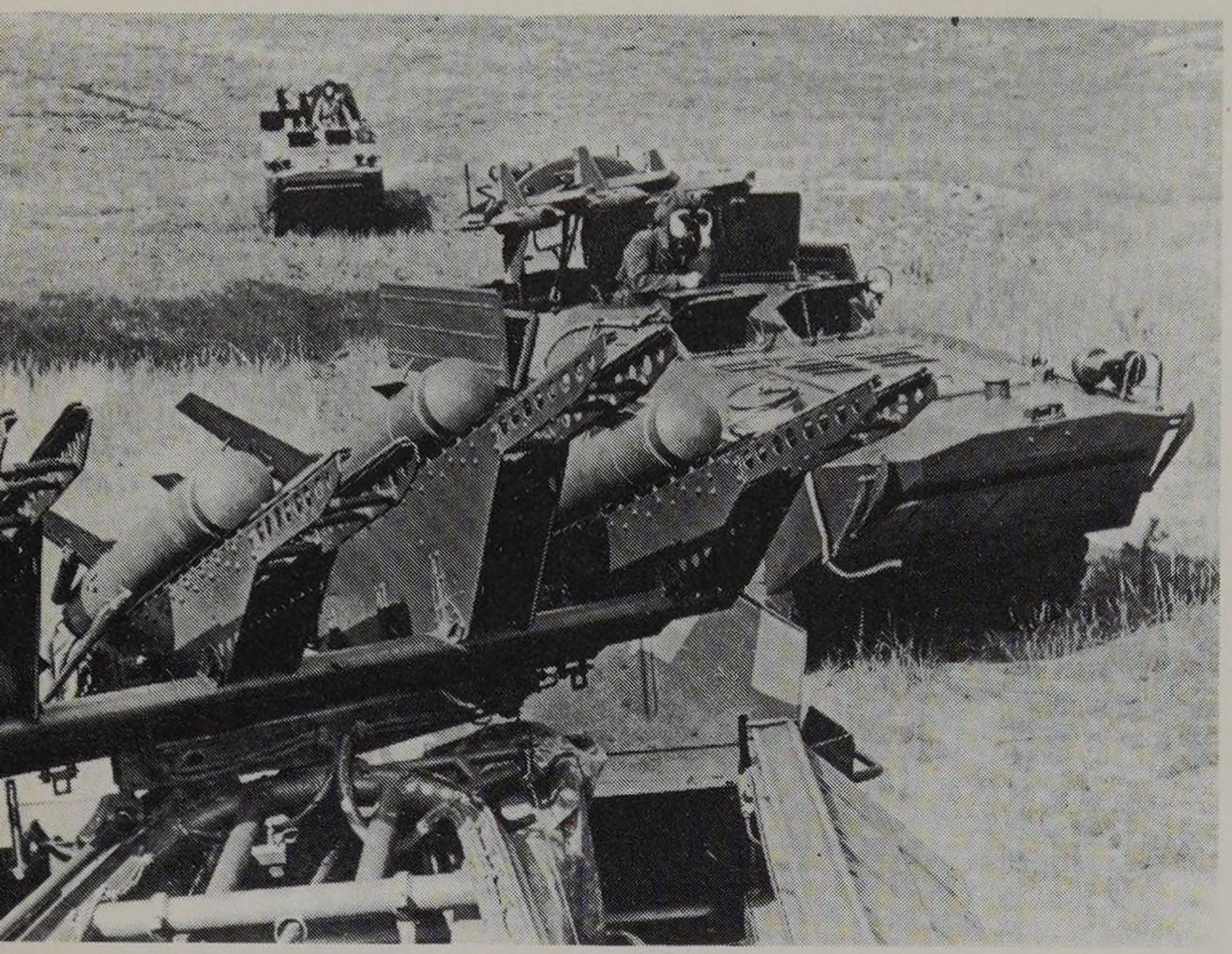
1,300 artillery pieces: 76 mm, 100 mm, 122 mm, 130 mm, 152 mm and 180 mm. Forty 203 mm howitzers; 200 SU-100 and ISU-152 SP guns; 300 mortars (120 mm, 160 mm and 240 mm calibre); 300 rocket launchers (140 mm and 240 mm); 900 anti-tank guns (57 mm, 85 mm and 100 mm); 900 recoilless anti-tank rifles (82 mm and 107 mm), 1,000 Sagger,



Below left *Soviet Joseph Stalin heavy tanks on parade in Egypt* (AP). **Below** *A Soviet-built BTR-50P amphibious APC in Egyptian service. Note the SAM 2 in the background* (Christopher F. Foss).









Left *Background — Soviet BRDM amphibious scout cars with Snapper ATGWs. Foreground — BRDM with four Swatter ATGWs* (Christopher F. Foss). **Below left** *BAC Swingfire ATGW being launched from a forward control 1-tonne Landrover. This version of the weapon system is known as Beeswing and is designed for use with infantry units* (BAC Ltd).

Snapper and Swatter ATGWs with a large quantity of British Beeswing ATGWs just ordered. SSMs include 30 Frog-3/-7s and 24 Scuds and Samlets.

SP AA guns are 350 ZSU-23-4 and ZSU-57-2 equipments while SAMs are SA6/7/9.

Army uniforms

Soldiers: *Summer dress:* Beret (dark blue or khaki) with brass eagle badge, khaki shirt with sleeves, khaki slacks, web belt and gaiters, black boots. *Winter dress:* As above but with woollen khaki battledress blouse.

Officers: *Summer dress:* Beret or khaki peaked cap with brown leather (gold for senior officers) chinstrap bearing brass enamelled eagle badge; light khaki service dress with four-button front (buttons half round and bearing the eagle), four patch pockets; shoulder boards in the facing colour with brass rank badges, brass regimental collar badges (see diagrams). Light khaki shirt and tie. *Winter dress:* As for the men.

Regimental badges (worn on the collar, all under a star and crescent moon): *Armour:* A winged horse, two lances and a tank, green facing. *Artillery:* A grenade bursting, black facing. *Engineers:* Three waggon wheels, khaki facing. *Signals:* Lightning flashes above wings in a wreath, khaki facing. *Infantry:* A charging soldier within a wreath, blue facing. *Presidential Guard:* An eagle, blue facing piped red. *Paratroops:* ?, crimson facing. *Medical:* A serpent and staff within a wreath, khaki facing. *Veterinary:* A horse within a wreath, khaki facing. *Ordnance:* A trophy of arms, khaki facing. *Supply:* An eight-pointed 'star', khaki facing. *Maintenance:* A cog wheel within a wreath, khaki facing. *Military Police:* ?, red facing. *Frontier Corps:* A lion's head, khaki facing.

Badges of rank: The British system but with the following alterations (the crown has been replaced by the national eagle since Farouk's expulsion): *Corporal:* A five-pointed star above a single chevron. *Staff Sergeant:* A five-pointed star above three chevrons. *Master Sergeant:* An eagle above four chevrons. *Warrant Officer:* An eagle on both cuffs.

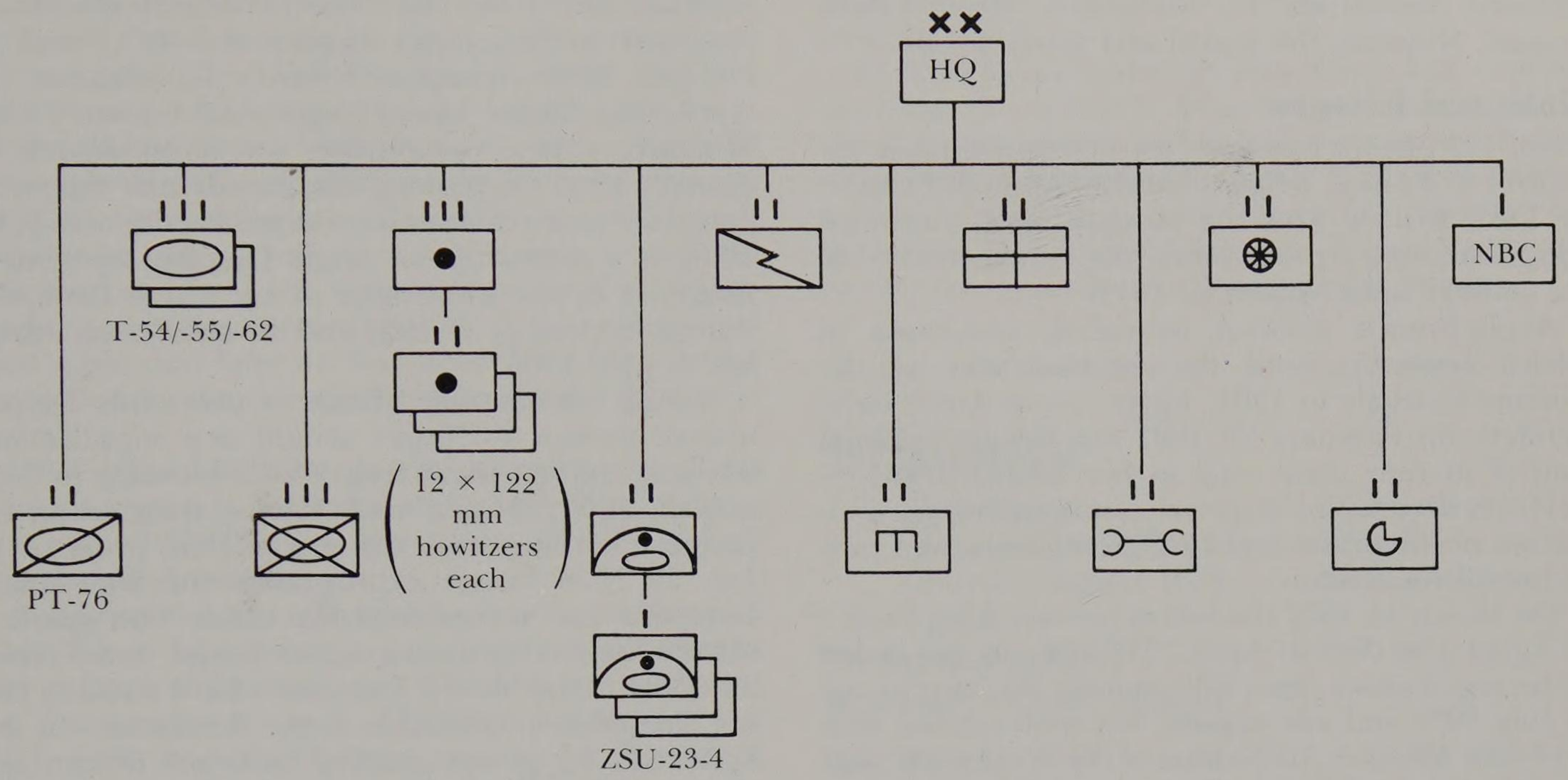
Officers' stars have five points and the crown is replaced by the national eagle. During the 1960s the rank badges for Brigadiers and above were redesigned and are now as follows:

Field Marshal: The eagle over crossed sabre and baton within a wreath. *General:* The eagle over three stars in pyramid over crossed sabre and baton (no wreath). *Lieutenant General:* The eagle over two stars (laterally placed) over crossed sabre and baton. *Major General:* The eagle over one star over crossed sabre and baton. *Brigadier:* The eagle over crossed sabre and baton.

History of the Army

Prior to 1936 the size of the Army had been limited by agreement with the British protective power but in that year a new treaty was signed removing these rectrictions. The Army was British equipped, armed and trained, a British military mission having been in the country from 1936 to 1947. In 1939 Egyptian Army strength was 22,000 and in 1948 this had risen

Arab (Egypt, Syria, Iraq) Armoured Division



Arab Armoured Infantry Division

to a theoretical 50,000 although actual strength was much lower and the force which could be made available for the invasion of Israel that year was only 10,000. This rose later in the campaign to 40,000 but included thousands of volunteers from Libya, Tunisia, Morocco, the Sudan and Saudi Arabia.

National history

From 1798 Egypt had been the object of a tussle for control by France, Britain and the Ottoman Empire; in 1882 Britain won the struggle and controlled Egypt although a protectorate was not established in the country until November 1914.

Anglo-French colonial wrangling continued in Africa however, until the establishment of the Entente Cordiale in 1904. Egypt was declared independent on February 28 1922 but Britain retained control in four areas vital to her own interests — defence, security of imperial communications, protection of minorities and foreign interests, and protection of the Sudan.

On March 15 1922 the Sultan became King Fuad I of Egypt who died in April 1936 and was succeeded by his son, Farouk, then still a minor. He came of age in July 1937 and was popular but soon clashed with his Prime Minister An-Nahhas of the Wafd party, and Farouk dismissed him in December 1937. Ali Mahir, fairly anti-British, was appointed to succeed him but when Rommel and his Axis forces were at El 'Alamein in 1942 the British forced Farouk to replace Ali Mahir with An-Nahhas. Anti-British demonstrations increased after the war and Egypt became involved in the Palestinian problem. After their defeat in the first Arab-Israeli war in 1948, the Egyptian Prime Minister, An-Nugrashi, was murdered in December 1948 by the anti-British Moslem Brotherhood which he had attempted to suppress.

In January 1950 the Wafd again came to power in Egypt with An-Nahhas as Prime Minister; in October 1951 he broke off the Treaty with Britain and the Condominium Agreement. Riots and British repressive action resulted in An-Nahhas' dismissal in January 1952. The Wafd and the King were in discredit with the populace as they were accused of supplying faulty weapons to the troops operating against the Jews in Palestine.

On the night of July 22-23 1952 a group of young Army officers (the Free Officers) carried out a coup and set up the Revolution Command Council (RCC). Farouk was deposed, his infant son proclaimed King Fuad II and a council of regency appointed. Real leader of the Free Officers was Colonel Gamal Abdel Nasser but the figurehead was General Mohammed Neguib who took over power from the civilian Prime Minister in September 1952 and decreed agrarian reform two days later. The old political parties were abolished and a new organisation — the Liberation Rally — with Nasser at its head, was set up. In June 1953 Egypt was declared a republic with Neguib as President and Prime Minister, Nasser his deputy and Minister of the Interior. The Moslem Brotherhood operated underground against the RCC and in October 1954 attempted Nasser's assassination. In April 1954 Nasser ousted Neguib and became Prime Minister; a new constitution was promulgated in January 1956 establishing the presidential system of government and Nasser was elected President in June 1956 by a plebiscite. An Anglo-Egyptian agreement finalising British evacuation of the Canal Zone was signed on October 19 1954 and the last British troops left in June 1955.

Having cut ties with Britain — previously Egypt's martial mentor — Nasser sought new supplies and advisers and got them from Czechoslovakia in September 1955. Britain and France then withdrew financial backing from the Aswan Dam project. On July 26 1956 Nasser expropriated the Suez Canal Company and nationalised the canal. This sparked off the Suez crisis during which British and French influence in the Middle East took a hard knock, a fact not altogether unpalatable to the Americans. In the Suez crisis Egypt was attacked by Israel, Britain and France (although the British effort was bedevilled by political indecision) in a war lasting from October 29-November 7 1956. The Anglo-Egyptian Canal Zone agreement was abrogated by Egypt on January 1 1957.

Nasser's prestige in the Arab world rocketed with his 'martyrdom' at imperialist hands and Russia hastened to fill the vacuum left by the departing westerners by providing funds for the Aswan Dam, which was finished in 1968. She also provided weapons, equipment and advisers for the Egyptian armed forces. Nasser now sought to pursue his vision of leading the three circles of the Arab, African and Islamic communities and Egypt became a hot-bed of support for revolution in other countries. In February 1958 Syria joined Egypt in the 'United Arab Republic' (UAR) and the Kingdom of Yemen also joined in March 1958. The old mutual mistrust was still there and in October 1961 the union was dissolved, Egypt retaining the title UAR for herself.

Egypt's exported revolution contributed to the downfall of the Iraqi monarchy in July 1958 but the resultant military regimes showed no keenness to throw their lot in with Nasser and the monarchies of Jordan and Saudi Arabia were driven even further from Egypt than before. The royal house in the Yemen was overthrown in September 1962 and Egypt rushed forces there in support of the resultant republican regime. This further muddied relations with Saudi Arabia who supported the Yemeni

royalists. The UAR withdrew its troops from Yemen in December 1967.

In June 1967 Nasser ordered the UN observers (who had been manning cease-fire lines between Israel and her Arab neighbours since 1956) to withdraw and Israel, fearing an attack, took pre-emptive action against the UAR and Jordan in the Six Day War during which they occupied the entire Sinai peninsula and Syria's Golan Heights. This effectively closed the Suez Canal which was now just an obstacle dividing the combatants. In September 1970 civil war broke out in Jordan as the King crushed the Palestinians who were threatening his rule of that country and Nasser mediated to restore peace but died a few days later on September 28 1970. He was succeeded by the current Egyptian leader Anwar as Sadat.

On August 2 1972 Egypt and Libya agreed to form a new completely unified United Arab Republic but in August 1973 this was amended so that each state remained independent.

Following the Yom Kippur War, relationships between the two states have deteriorated seriously and at one point in 1976 their armed forces were confronting one another across the frontier and the air was thick with invective. Libyan reaction to President Sadat's recent peace talks with Israel was extremely hostile and she has become the focal point of Arab resistance to this move towards peace in the Middle East. Syria is among the hard-liners on the Palestine question and thus also opposed to Sadat's peace moves as is Iraq.

In many respects Egypt is a developing nation only recently freed from a feudal system and still striving to forge a national image with which the majority of the population can identify. The peasant classes are largely untouched by the 20th century and ideals such as national unity and pride are still fragile plants compared with the desperate daily struggle for survival. This problem has its effects on the operational efficiency and morale of the armed forces as has been repeatedly demonstrated in the various wars with Israel. Carefully planned operations employing controlled masses as used by the Warsaw Pact forces are quite likely to succeed, as was shown in the brilliantly executed Suez Canal crossing at the start of the Yom Kippur War and the well executed anti-tank defence in the area east of the canal where saturation of the unbalanced Israeli armoured offensive with ATGWs was extremely successful and caused a flurry of speculation among military theorists the world over as to whether the tank had had its day. It is in more fluid operations, when the level of decision making moves down from generals to junior officers and even to NCOs that the weaknesses of a less than fully developed, modern democratic society become evident. Leadership training — a new concept for the masses in a society such as Egypt's — is fighting against centuries of apathy aggravated by the Moslem religious teaching that a thing will happen 'if Allah wills' and that human endeavour thereby becomes irrelevant.

In 1976 Egypt broke ties with Russia and expelled the numerous advisers. Since then she has turned to the west for military and technical assistance. British technicians now service Egyptian T-62s and sales of British hardware are progressing fast. Interest has been shown in Vigilant ATGWs, Rapier SAMs and the Ranger anti-personnel mine-laying devices.

Ethiopia

Population	—	29.3 million
Estimated GNP 1975	—	$2.9 billion
Defence budget 1976	—	$103.4 million

Armed Forces
Voluntary military service.

Air Force
2,000 men with 35 combat planes. One bomber squadron with two Canberra B2s, three FGA squadrons with 20 F-5s and seven F-86Fs; one recce squadron with six T-28As; a transport squadron with six C-47s, two C-54s, seven C-119Gs, three Doves, one Il-14 *Crate* and one Otter. Training wing has three squadrons with 20 Safirs, 13 T-28A/Ds and 20 T-33As. There is a helicopter squadron with ten AB-204s, five Alouette IIIs, two *Hips* and ten UH-1Hs.

Navy
1,500 men. One ex-Dutch minesweeper, three ex-US large patrol craft, four ex-US 'Swift' Class and one 'Kraljevica' ex-Soviet FPBs, four coastal patrol boats (under 50 tonnes), four ex-US landing craft and one training ship (an ex-US seaplane tender).

Army
50,000 men. Four infantry divisions, three with three infantry brigades each, the fourth with one mechanised, one motorised and one infantry brigade. One COIN division, one AB infantry battalion; five artillery and one engineer battalion.

Reserves
20,000.

Para-Military Forces
Gendarmerie — 6,800; Frontier Guards — 1,200;



A Hughes UH-1B anti-tank helicopter fitted with launch pads for six TOW ATGWs (Hughes Aircraft Company).

Commando Force — 3,200; Mobile Emergency Police Force — 9,000; People's Militia 75,000.

Equipment

(All data is now conjectural since the massive Soviet and Cuban aid programme began in late 1977; war losses in Eritrea, the Ogaden and other dissident regions further complicate the picture.)

Old American (World War 2) and now newer Soviet small arms, 35 M-60s, 35 T-34 and T-54 MBTs; 70 M-41 light tanks, 56 AML-60 armoured cars, 90 M-113 APCs, some US Commandos, M-59s and 40 BTR-152 APCs; 36 75 mm Pack, 52 105 mm, 12 155 mm towed howitzers; 12 M-109 155 mm SP howitzers; 146 M-2 107 mm and 140 M-30 4.2-inch mortars.

Army uniform

Khaki beret, shirt and trousers, US-style helmets and web equipment, black boots.

History of the Army

Prior to colonisation by the Italians there existed only a few royal guards and then a levée en masse as the need arose. After 1945 a more formal organisation began slowly to appear with a multi-divisional Army, a Navy and an Air Force. Since Communist influence became predominant it is to be expected that the Warsaw Pact style of organisation has been introduced but the levée en masse has recently been resorted to once more in the struggle to suppress the Eritrean Secessionists.

National history

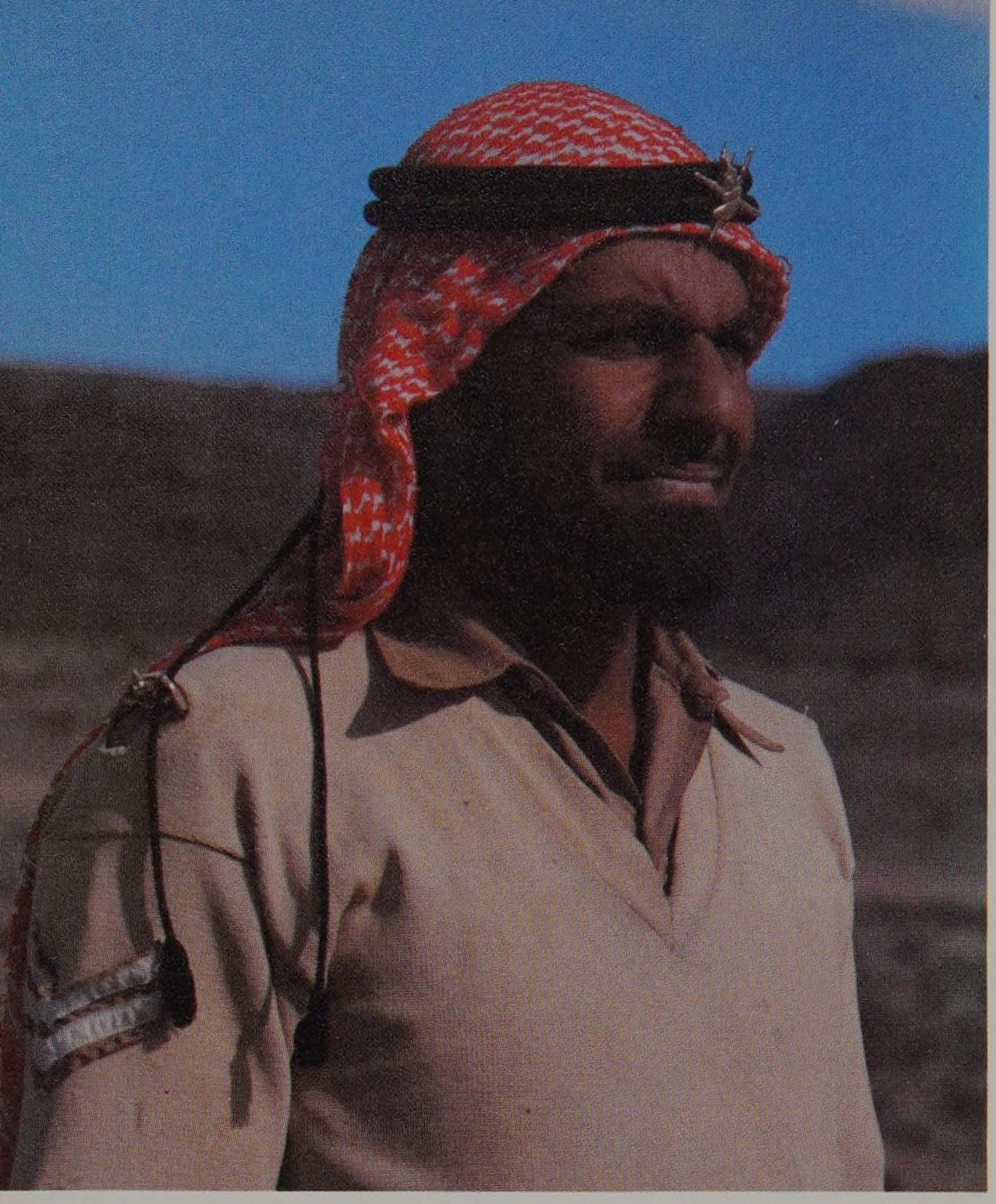
The Horn of Africa was a rich hunting ground in the 19th century for European colonial powers. In 1885 the Italians joined the British and French in the scramble for the division of Somalia by annexing the coast around Mogadishu. This met with British approval as it provided a counterweight to French expansion in the area. In 1881 the French established a protectorate in Djibouti and in 1884 the British did the same in the Berbera area. Even then the Somalis were anxious about intervention and conquest from Ethiopia. The Italians, encouraged by their initial success, concluded with Emperor Menelik II of Ethiopia the Treaty of Wuchale in 1889 by which they thought that they had established another protectorate, this time in the entire Ethiopian empire instead of just in Eritrea. Menelik had other ideas, however, and in 1896 he soundly defeated an Italian 'protective' force at the Battle of Adowa. Also in that year, Britain agreed frontier delineations with the Ethiopians along their holdings in Somaliland, British East Africa and Anglo-Egyptian Sudan.

In 1935 the Italians invaded Ethiopia and brought it under their control. The Emperor of Ethiopia (Haile Selassie I) made an impassioned but vain plea for justice to the League of Nations after his country's defeat. On May 5 1936 Addis Ababa fell to the Italians who, in February 1937, decimated the city's population and massacred the monks of the great monastery of Debre Libanos.

In 1941 British forces helped the Ethiopian patriots to expel their Italian conquerors and Haile Selassie returned to his throne on May 5 that year. Britain retained control of the Ogaden region until 1948 and of Eritrea until 1952. In 1953 Ethiopia signed a mutual defence treaty with the USA and the first general elections were held in 1957. There was an abortive coup d'état in 1960 but the infant political institutions survived intact.

In international affairs Ethiopia played a leading

Above *Visiting British General being escorted by ceremonial guard of the Trucial Oman Scouts with their standard (*Soldier *magazine).* **Below** *Lieutenant and Signallers of the Aden Federal Republican Army 1964. Note the British-style rank badges, side hat and dark blue lanyard (worn on the right shoulder as with the Royal Signals) (*Soldier *magazine).*







Far left *Corporal, Desert Regiment, Sultan of Muscat's Armed Forces. The details of the traditional Arab head-dress are clearly shown (*Soldier *magazine).*

Left *Major, Muscat Regiment, Sultan of Muscat's Armed Forces. Note the shoulder titles with red backing and matching stable belt and lanyard (*Soldier *magazine).*

Below left *Ceremonial parade of the Aden Protectorate Levies 1959. The crossed daggers badge was later adopted by the Federal Republican Army when the British left the colony (*Soldier *magazine).*

Right *Dhow patrol of the Trucial Oman Scouts (*Soldier *magazine).*

Below *Dhofar patrol of the Sultan of Muscat's Armed Forces. Note the British-style rank badges, 1937 pattern web equipment and donkey-borne ammunition and logistic supply train (*Soldier *magazine).*





Above *Camel patrol of the Trucial Oman Scouts, Sharjah 1964 (*Soldier *magazine)*. **Below** *Saladin armoured car in action in Aden (*Soldier *magazine)*.
Below right *A Captain of the Abu Dhabi Defence Force with British General Service Medal (Major W. G. V. Kenney REME). (Page 105)*

part in setting up and developing the Organisation of African Unity but, paradoxically, she is now almost at war with her neighbour, Somalia, over a disputed border and the existence of a large Somali community in the Ogaden region. Relations with the Sudan are also strained.

A confused position exists in Eritrea where, in 1962, that province's parliament demanded a greater degree of independence. In 1966 a revolt broke out there, the main causes of which were neglect and underprivilege. The Eritrean Liberation Front (ELF) was set up and received aid from many Arab countries who disliked Ethiopia's pro-Israeli policy. Syria, Iraq and Libya were accused of aiding the rebels.

The Ethiopian Army deposed Haile Selassie on September 12 1974 and took him to 'a place of safety' where he was held until his death on August 27 1975 following an operation. The military junta set up the Provisional Military Administrative Council (PMAC) (known from February 1977 as the Derg) to rule the country and, after inviting Crown Prince Merid Azmatch Asfa Wossen to rule in his father's stead, abolished the monarchy on March 21 1975. Most of the Ethiopian royal family and the nobility were arrested and executed on November 23 1974.

Haile Selassie had been an absolute monarch and had permitted no political parties in the country. This repression was aggravated by natural disasters and poor harvests in 1972-1973. These factors, together with the diverse tribal nature of the people, led to the near disintegration of the state and much unrest in the armed forces.

Following months of violent action by the new military regime against popular resistance, the USA broke off her military aid programme to that country on February 24 1977 and Ethiopia turned to the USSR and Cuba for military supplies and advice in May 1977.

Following the abolition of the Ethiopian monarchy, effective power had been held by Brigadier Teferi Benti but he was killed, along with many others, in another coup in Addis Ababa on February 3 1977 whereby hard line Communists came to power. The new head of state was Lieutenant Colonel Mengistu Haile Mariam.

The abolition of the monarchy and of the feudal land tenant system in the mainly peasant economy of the country led to a revolution in which all vestiges of the old order were ruthlessly destroyed thus leaving a vacuum. Mass executions of 'reactionary elements' followed this latest lurch to the left — a pattern of events familiar to all students of the Communist way. In July 1976 the Ethiopians assisted the so-called 'Sudanese National Front' (SNF) to carry out a minor invasion of the Sudan — a tit-for-tat event as the Sudanese had been aiding the Eritrean ELF.

The Empire of Iran

This section refers to the state of the Army *before* the overthrow of the Peacock Throne. For the current situation see 'section 5, Recent Events'.

Population	—	34.8 million
Estimated GNP 1977	—	$56.8 billion
Defence budget 1977	—	$7.9 billion

Armed Forces

Two year conscription liability.

Air Force

100,000 men, 341 combat planes of American origin. Ten fighter-bomber squadrons with 32 F-4Ds, 141 F-4Es with Sidewinder and Sparrow AAMs and Maverick ASMs.

Ten FGA squadrons with 12 F-5A and 100 F-5E planes. Two fighter squadrons with 40 F-14A Tomcats. One reconnaissance squadron (16 RF-4Es), an air tanker squadron (ten Boeing 707-320Ls).

Transport Command had four medium squadrons (57C-130E/Hs and five Boeing 747s) and four light squadrons (23 F-27s, three Aero Commander 690s and four Falcon 20s).

Helicopters included ten Huskies, six AB-205s, four AB-206As, five AB-212s, five Bell 214Cs, two CH-47Cs and 16 Super Frelons.

Training was carried out in nine T-33s, 18 F-5B/Fs and 30 Bonanza F33-A/Cs. On order for the Shah's Air Force were 69 F-5E/F, 40 F-14, 160 F-16 fighters, four Boeing 747s, two F-27 transports, one Boeing 707-320C tanker; 50 CH-47s, two AS-61As and 38 Bell 214C helicopters; 19 Bonanza F-33A/C trainers; Phoenix, Sidewinder and Sparrow AAMs and Blindfire SAM radar.

Airfield defence was carried out with British Rapier and 25 Tigercat SAMs.

Navy

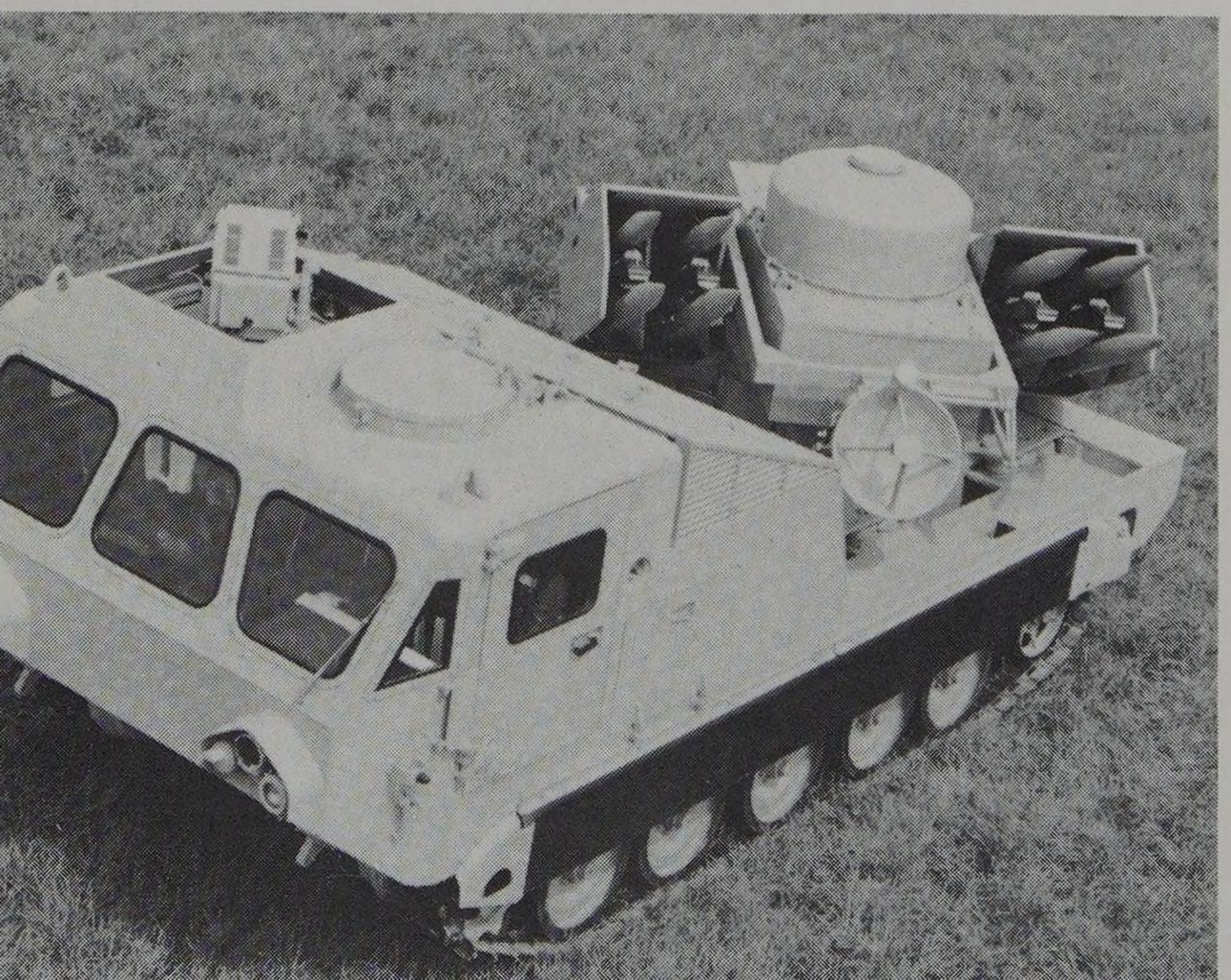
22,000 men including three battalions of marines; the equipment mainly of US supply.

Three destroyers (all with Standard, one also with Seacat SAMs); four frigates (with Seakiller Mk 2 SSMs and Seacat SAMs); four corvettes; 20 patrol boats; five minesweepers; two landing ships; two landing craft; two logistic support ships; eight SRN-6 and six Wellington BH-7 hovercraft. On order were four Spruance Class destroyers, 12 fast patrol boats with Exocet SSMs, two landing craft and three Tang Class submarines.

The Naval Air Service included one reconnaissance squadron with six P-3F Orions, one ASW squadron (six S-65As), a transport squadron (six Shrike Commanders and four F-27s); five AB-205A, 14 AB-206A, six AB-212, 20 SH-3D and three RH-53D



Above *Imperial Iranian Infantry. Note the German small arms (MG2 and Gewehr G3) and US-style helmets* (Soldier magazine). **Below** *A model of the production version of the BAC tracked Rapier low level SAM. The system is designed for service with armoured formations. An accompanying missile re-supply vehicle carries 20 SAMs* (BAC Ltd). **Below right** *Imperial Iranian troops using M-113 APCs mounted with TOW ATGWs. From the collar badges we identify a corporal of artillery (2nd from left) and motorised infantry (crossed rifles)* (Christopher F. Foss).



helicopters.

On order were three P-3C reconnaissance planes and three RH-53D helicopters.

Army

220,000 men. Three armoured and four infantry divisions, two infantry, one airborne and one special forces (Green Beret) brigades.

Equipment

Equipment was an interesting mixture of what the Iranians judged to be the best on the market regardless of the political affiliations of the manufacturers. Small arms were the West German G3 assault rifle and the MG-2 machine-gun; also the American Colt M1911A1. They had 760 British Chieftain MBTs, 400 US M-47/M-48s; 460 US M-60A1 medium tanks, 250 British Scorpion light tanks; over 100 British Ferret (obsolescent) and Fox scout cars and about 2,000 APCs including the ubiquitous US M-113 and the Soviet BTR-40/-60/-152 APCs. Artillery guns and howitzers included 75 mm; 330 105 mm; 130 mm; 100 155 mm and 175 mm SP equipments; 203 mm howitzers (both SP and towed) and 64 Soviet BM-21 rocket launchers.

Anti-tank weapons included the US 106 mm RCL, French ENTAC, SS11 and SS12 missiles and American Dragon and TOW ATGWs. Air defence equipment included 650 23 mm, 35 mm, 40 mm, 57 mm and 85 mm towed and Soviet ZSU-23-4, ZSU-57-2 SP guns as well as a battalion with US Hawk SAMs.

To strengthen this already impressive array, the Shah ordered 1,220 Chieftain MBTs, 110 Scorpions, some Soviet BMP MICV, ASU-85 anti-tank and ZSU-23-4 SP AA guns; British Rapier, US Improved Hawk and Soviet SA 7/9 SAMs.

The Army Air Command was equipped with 45 Cessna 185, ten 0-2A, six Cessna 310, three F-27 and five Shrike Commander fixed wing planes and 120 AH-1J, 100 Bell 214A, 20 Huskie, 52 AB-205A and 40 CH-47C helicopters. On order were 193 Bell 214As and 82 AH-1Js.

Reserves
500,000.

Para-Military Forces

Gendarmerie — 70,000.

Army uniforms

Officers: Khaki service dress with four-button tunic having four patch pockets, black leather Sam Browne belt and silver fittings, black shoes, khaki peaked cap with black leather chin strap and silver and gold cap badge (a sunburst with crowned lion holding a

sword); gold buttons bearing the sunburst and lion. On the upper left arm the national shield — black with the golden crown, sunburst and inscription.

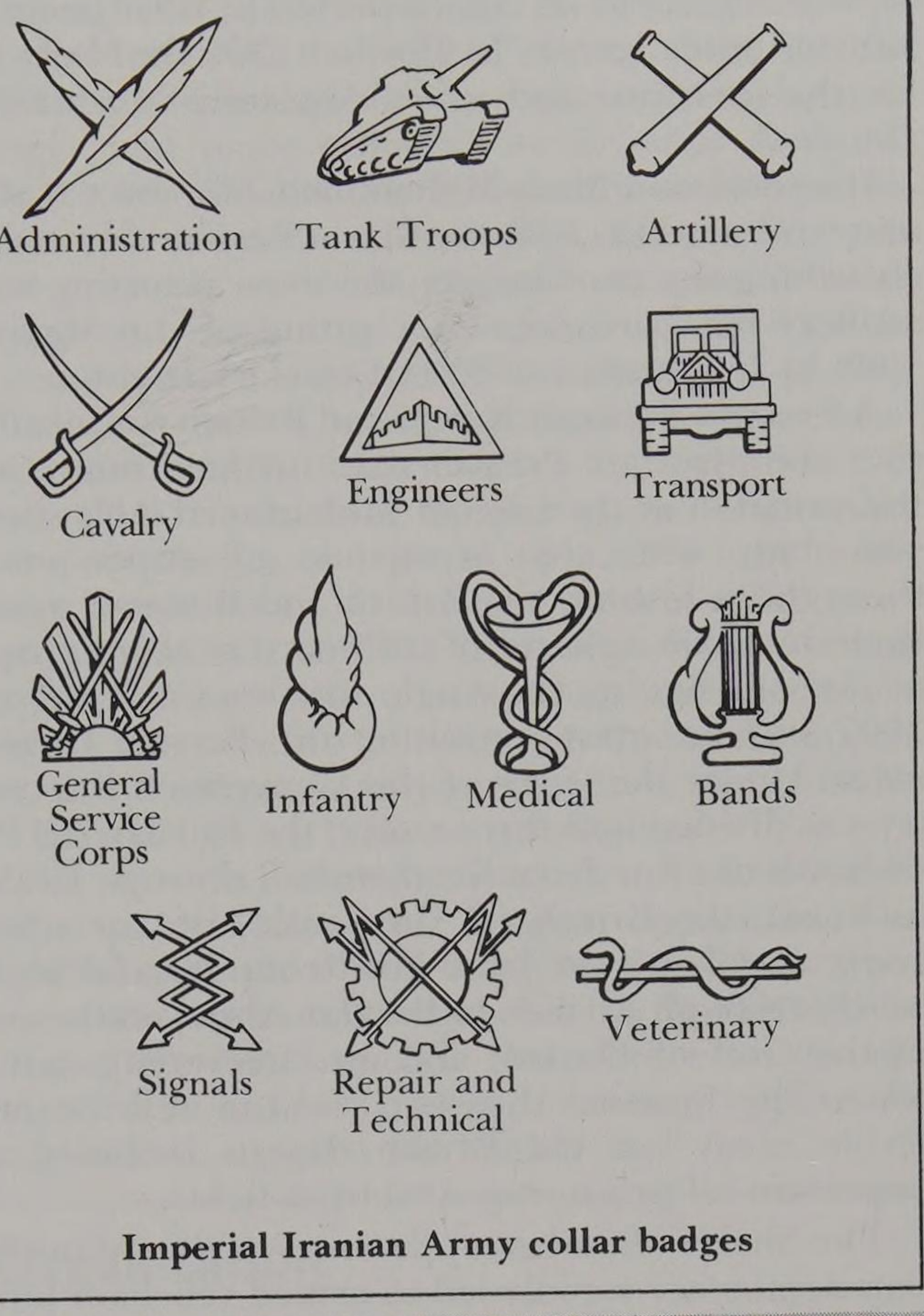
Soldiers: as for officers.

Regimental badges (brass, worn on the collar): *Armour:* An advancing tank. *Cavalry:* Crossed sabres. *Artillery:* Crossed cannon barrels. *Engineers:* Within a triangle a bastion with towers. *Signals:* Two intertwined lightning flashes. *Infantry:* A flaming grenade. *Medical:* Two snakes entwined around a stemmed cup. *Veterinary:* A serpent entwined on a staff. *Transport:* A lorry (head on). *Administration:* Crossed quill pens. *Technical Corps:* Crossed lightning flashes on a cog wheel. *Bands:* A lyre. *General Service Corps:* Crossed swords on a sunburst.

Badges of rank — Officers (gold, worn on the shoulder): *General:* The imperial crown over four five-pointed stars in a square formation. *Lieutenant General:* The crown over three stars in triangular formation (point up). *Major General:* The crown over two stars side by side. *Brigadier:* The crown over one five-pointed star. *Colonel:* Three eight-pointed silver stars with gold centres showing the lion with sword. *Lieutenant Colonel:* Two such stars. *Major:* One such star. *Captain:* Three five-pointed gold stars in line. *First Lieutenant:* Two such stars. *Second Lieutenant:* One such star. *Third Lieutenant:* A black pentagon.

Hofomar (a technicians' rank system, gold bars edged black on the shoulder straps): *Hofomar Three:* Three bars one above the other. *Hofomar Two:* Two bars. *Hofomar One:* One bar.

Soldiers (white chevrons, point up, on the upper sleeves): *Master Sergeant 1st Class:* Three chevrons with two arcs beneath them. As above but only one arc beneath the chevrons. *Third Sergeant:* Three chevrons. *Second Sergeant:* Two chevrons. *First Sergeant:* One chevron. *Private:* No badges.



Imperial Iranian Army collar badges



History of the Army and the Nation

At the beginning of the 20th century Persia had sunk to a position of impoverished stagnation and impotence, a situation largely brought about by the then Shah, Muzaffar ud Din. During his reign he had parted with most of his inheritance including family treasures and imperial and national domains. His weak personality had led to him being the puppet of a ring of corrupt courtiers who sponged their way through the imperial fortunes. Muzaffar ud Din became deeply indebted to foreign moneylenders to maintain his aimless existence and the national debt increased annually to forbidding proportions. Finally even the submissive Persian working classes began to foment rebellion and violence broke out in various towns.

Not until the Shah signed a decree in August 1906

granting constitutional government and the formation of a National Assembly (the Majlis) of 162 representatives of all classes elected by their peers did internal peace return. In October 1906 the Majlis met for the first time and a few days later Muzaffar ud Din died.

His successor, Shah Mohammed Ali, was a reactionary and tried to crush the infant Persian democracy, abolishing the constitution and even resorting to an artillery bombardment of a sitting of the Majlis in 1908 by his Russian-officered Cossack Division.

A struggle between Russia and Britain for infuence over the prostrate Persian state further complicated the situation at the time of Mohammed Ali's succession but, with the arrogance of super-powers throughout history, the British and Russians agreed to define their spheres of influence in this unhappy country by signing the Anglo-Russian Convention in 1907 without even consulting the Persian Government! Under the terms of this Convention the country was divided into three zones; the Russian (all Persia north of a line from Kermanshah through Isfahan to Yazd), the British (in the south-east, up against India and bounded by a line from Birjand in the north, through Kirman to Bandar Abbas on the coast of the Gulf of Oman); and an intervening neutral zone. The Russians thus had Tehran and the most fertile areas but the British deserts included the important oil producing Arabistan fields.

The Shah's relentless oppression of the infant Persian democracy rapidly led to armed rebellion bursting out all over the country and in 1909 the Constitutionalists seized control of Tehran and forced Mohammed Ali to abdicate in favour of his 12-year-old son, Ahmad Mirza. After several unsuccessful attempts to regain his throne, Mohammed Ali retired into Russia and was allowed a pension by the Persian Government. His dabbling in Persian affairs continued, however, and supported by his brother, Salar ud Doulah and 14,000 Russian troops, more fruitless interventions were launched between 1911 and 1913.

The state of the nation staggered from bad to worse; the treasury was empty, the Army totally ineffective and civil disturbance the rule rather than the exception. No national hero emerged to fill the gap and Britain and Russia scarcely helped matters, engrossed as they were in their own selfish schemes. When World War 1 brought occupation of Persia by Turkish troops and German agents the country sank even further into chaos and neglect. The Russian Revolution of 1918 brought about the withdrawal of their forces from northern Persia, and the British moved rapidly forward from Iraq to occupy Baku and the vital oil fields around the Caspian Sea and to link up with the existing British forces in the south-east of the country. The Baku adventure foundered due to lack of local support but the British remained in northern Persia.

In 1919 the British and Persian Governments concluded the Anglo-Persian Agreement by which Britain was to retain her influence in Persia in return for £2 million sterling annually and assistance in the reorganisation of the country's Army and finances. In anticipation of final approval of the Agreement British military and financial missions were already in Persia but their travels were in vain as the Majlis refused to ratify the treaty — perhaps under pressure from the French and American Governments, neither of whom were keen to see Britain too strong in the vital oil producing areas. British troops withdrew from the northern oil fields in April 1921.

When the Bolsheviks had secured their hold on power within Russia in 1920, they at once sought to re-establish their presence in Persia and sent in their agents while concentrating forces along the frontier, and launching a violent anti-Persian propaganda campaign aimed at fomenting a Red revolution to topple the Shah. Bolshevik forces actually landed at Enzeli on the Caspian and linked up with Persian revolutionaries under Kuchik Khan in an advance on Tehran before being halted (but not expelled) by Persian royalist forces with British support.

Negotiations between Persia and Russia resulted in February 1921 in a withdrawal of Russian military forces from Persian soil and return to Persia of all concessions held by the Tzarist Government in return for the establishment of a Russian legation in Tehran and Russian consulates in all major Persian towns.

Shortly after this, the Persian patriot Saiyid Zia ud Din, at the head of the Cossack Division, overthrew the government, ratified the Russo-Persian treaty, denounced the Anglo-Persian Agreement but instituted sweeping reforms which incorporated various points from that same agreement and brought back the British financial and military missions. Unfortunately Saiyid Zia ud Din was forced to resign in May 1921 and the cabinet which followed him was much under Russian influence. The pendulum swung back in favour of the British, however, thanks to Reza Khan (also known as Reza Pahlaof), one of the leaders of Saiyid Zia ud Din's coup d'état. He soon established himself as virtual military dictator with three main aims: the creation of an efficient, national Army; the elimination of foreign influence in Persian affairs; the establishment of a strong central government.

Armed forces within the country in April 1921 consisted of: *The Persian Cossack Division:* The Russian officers of which had been evacuated from Persia by the British in 1919 and 1920. *The Gendarmerie:* A military police force, trained and officered by Swedes

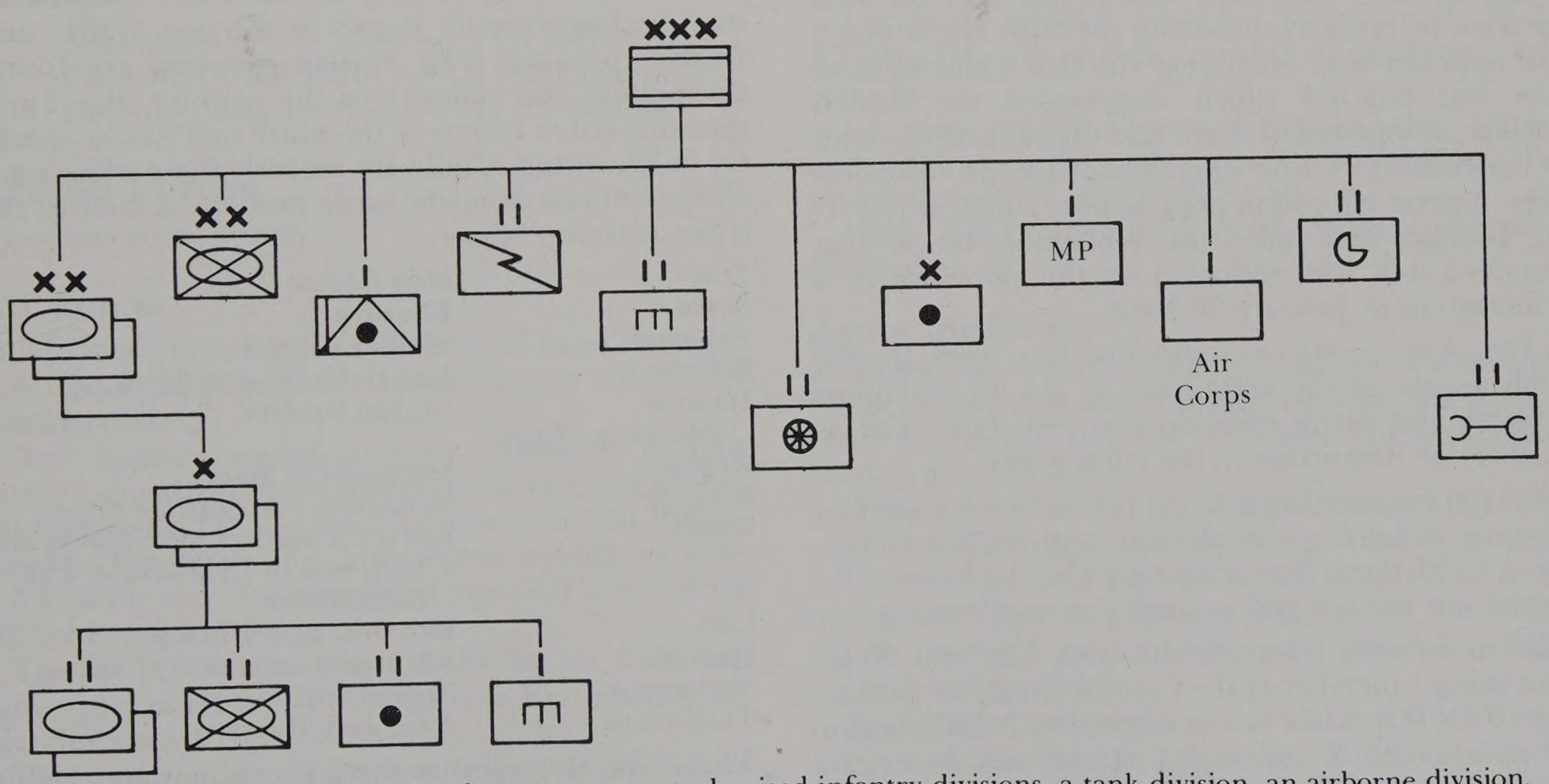
and with strong pro-German leanings. *The South Persia Rifles:* A British-raised and officered military force recruited in the provinces of Fars and Kirman to replace the pro-German Fars Gendarmerie which had been disbanded in 1917. This force was equipped and paid for by the British Government. *The Nizam:* The Persian regular Army, badly officered, ill-trained and poorly equipped.

Reza Khan disbanded all these forces as being either foreign or inefficient and in January 1922 declared the formation of the Qushun or Army. By 1924 the Qushun had a strength of 45,000 men and was being equipped with modern weapons. This infant force was cutting its teeth fighting the various rebellious and warlike tribes in northern Persia and in 1922-23 uprisings led by Kuchik Khan in Gilan province, Mohamed Taqi in Khorasan and Lahouti Khan in Azarbaijan were suppressed and the tribes disarmed.

By 1924 the British military presence in Persia was reduced to two companies and the other foreign military personnel in the country were some French, German and Russian flying instructors for the Air Force, German mechanical and technical advisers in the arsenal and Russian ex-Tsarist officers instructing in the military school.

To revitalise the economy, Reza Khan brought in the American Dr Millspaugh in November 1922 as Financial Adviser to the Persian Government. Millspaugh instituted sweeping reforms and began to raise revenue with the help of the Qushun but this itself led to difficulties because as the Army became stronger and more efficient, its financial demands made it very difficult for Millspaugh to balance his budget. One way out of these difficulties was the sale of oil concessions to Russia and Britain; Russian propaganda and the unpopular Anglo-Persian Agreement made it impossible for the Anglo-Persian Oil Company (APOC) to operate in the country, however, and American firms (Sinclair and Standard Oil) were invited to take over. Sinclair was willing to take up the concession but not to advance a loan to the Persian Government. Continued indecision led to an attempt on March 22 1924 (with Reza Khan's connivance) to depose the absent Shah and declare a republic. The venture failed largely due to the opposition of the country's religious leaders, the Mullahs, who feared loss of their own influence if the new republic were to follow the Turkish model. An additional, curious, factor was Russian opposition — a delightful example of the dangers of political hypothesis — the Russians thought that the British were in favour of the new republic and thus, even though they too were in favour, they decided to oppose the change and to support the Shah!

Iranian Army Corps Organisation



In addition to two such Corps there were two mechanised infantry divisions, a tank division, an airborne division, an Army Air Corps brigade and a long range patrol brigade.

Meanwhile, Millspaugh and his American financial advisory team were rapidly falling from favour due to their lack of success in achieving miracles with the country's failing economy. Reza Khan's popularity thus waned and with it that of his military regime. In 1925 the Majlis was reformed and enlarged into a special constituent assembly which elected Reza Pahlavi Shah and removed from power Ahmed Shah, last of the Qajar rulers. Reza Pahlavi was a firm ruler and in 1938 opened Iran's first railway from the Caspian Sea to the Persian Gulf. He introduced educational and judicial reforms which much reduced the power of the Mullahs, freed females from wearing the veil, modified divorce laws, restored the nation's self-confidence and increased independence from foreign political domination. Fear of Russia forced him towards Hitler's Germany and this resulted in an Anglo-Soviet invasion of Iran in 1941 to secure the vital American supply route to Russia. Reza Shah abdicated in 1941, left Iran and died in South Africa in 1944; he was succeeded by his son Mohammed Reza Pahlavi who had to grapple with the twin problems of post-war inflation and the power struggle with the landed nobility. In 1946 a Communist regime was set up in the Soviet-occupied province of Azerbaijan but it was successfully removed and in 1951 Mohammed Mossadeq, the then Prime Minister, nationalised Iranian oil and the British Oil Company was eliminated, but foreign oil interests had their revenge when Mossadeq's tour of office ended in turmoil in 1953.

In May 1961 the Shah cleared the way for vital agrarian reforms by dissolving the 20th Majlis which had opposed him. Next year the first Land Reform Law was enacted which dispossessed the landed nobility, compensated them and distributed the land to the cultivators who often formed rural co-operatives. A great education programme, aimed at reducing illiteracy and called the White Revolution, was launched and was endorsed by the populace in a referendum of January 26 1963.

The Army, with conscription, was used by the Shah as one of the main tools to aid his ambitious reforms and many conscripts served their time as teachers or instructors in the rural areas.

On the engineering side, oil revenues were used to increase technology, modernise and initiate industries, build dams for irrigation and hydro-electric power and rebuild and expand communications.

Relations were fostered with both East and West, Iran being a member of the Central Treaty Organisation (CENTO), while Soviet engineers in 1969 began construction of the country's first steel mill. American influence was also present and US military advisers were active in the Iranian forces.

The Shah did not achieve this impressive internal reform in his country without making enemies in various sections of his populace as the graffiti to be seen on the walls in various European and American cities testified ('Down with the fascist Shah') and the disturbances caused by dissident Iranian students in Washington on the occasion of the Shah's visit there in 1977 were yet another symptom of the problem. Having forced his country to tread the hazardous road of change, it remained to be seen if the Shah could survive the journey!

Relationships with his neighbours, particularly Iraq, were also troubled. During the Kurdish revolt in Iraq, Persian troops entered Kurdish areas in their support and the two states were on the brink of war before the Shah withdrew his men and left the Kurds to their fate.

He decided that Iran would fill the vacuum left by the collapse of British influence east of Suez and to this end was building up his armed forces at a pace. It is perhaps remarkable that the Iranian Army had more Chieftains than the British Army and this is a measure of the lengths to which the Shah was prepared to go in pursuit of his goal. He sent advisers and troops to fight Egyptian-inspired rebels in the Yemen and in Oman and his military equipment was as sophisticated as desired. It remained to be seen whether the Iranian Army would be his bolster against external and internal foes or would itself become ambitious.

The ethnic groups within Iran

The three main groupings of the tribes within Iran may be linguistically shown as Persian, Turki and Arabic speaking. The Persian speakers are found throughout the majority of the country, the Turki speaking tribes mainly in the north and Arabic speakers in Khuzistan. Until very recently these tribes were almost entirely nomadic cattle herders. A table of the tribes is shown below:

Tribe	*Main location*
Arabs	Khuzistan
Bakhtiari	West of Isfahan
Baluchis	East and south-east Persia
Hazaras (Mongolian types)	Afghan borders
Khamseh	South-east of Shiraz
Kuhgalu	North-west and north of Shiraz
Kurds	Along the borders with Turkey and Iraq, west of Urumieh, west of Kermanshah
Lurs	Burujird, Khurramabad
Qa-hqai	North-west and north of Shiraz
Shahsevans	Ardebil area
Turkomans	Asfarabad, Bujnurd

There are also various foreign communities within the country, for instance the Armenians in Julfa, Isfahan and northern Persia, Caucasians in Gilan and

Azerbaijan and scattered, small Jewish communities.

Like many developing nations, Iran has been plagued with the problem of creating a national identity in a short time from a feudal society which, until very recently, was starkly divided into the super-rich ruling class and the poverty stricken masses.

The best martial material has traditionally come from the nomadic tribes — the Kurds, Lurs and the Azerbaijani-Turks. They all have a long tradition of strife with the central government, the task facing Iran has been to channel their warlike qualities along national and not tribal lines.

The majority of the population are Shia Moslems but the Kurds and the inhabitants of Azerbaijan are mainly of the Sunni Moslem sect. In 1844 a non-conformist, puritanical branch of the Shia sect, the Bahaists, was founded but due to sporadic persecution by the government, this sect went underground.

The Armenians are akin to the Greek orthodox church, the Chaldeans are closely related to the church of Rome, the Jewish trading communities in the cities have their own synagogues but have been subjected to outbursts of violence in the past.

Education in Iran, as in other Moslem states, traditionally fell to the Mullahs and served the aim of maintaining their supremacy. It was, of course, limited entirely to males.

Iraq

Population	—	11.8 million
Estimated GNP 1976	—	$14.2 billion
Defence budget 1975	—	$1.66 billion

Armed Forces

Two-year conscription.

Air Force

25,000 men, including 10,000 devoted to air defence, and about 369 combat planes, mainly of Soviet manufacture.

One bomber squadron (four *Badgers*), a light bomber squadron (ten *Beagles*), 12 fighter squadrons (90 *Flogger Bs*, 60 *Moujiks*, 30 *Frescoes* and 20 British Hawker Hunters); five interceptor squadrons with 115 *Fishbeds* and 20 *Farmers* and one COIN squadron (20 Jet Provost T-52s).

Transport command has 12 An-2s, six *Cubs*, ten *Cokes*, 13 *Crates*, two TU-124s, two Heron and two Islander planes.

There are seven squadrons of helicopters with four *Hares*, 35 *Hounds*, 16 *Hooks*, 30 *Hips*, 40 Alouette IIIs and ten Super Frelons.

Training planes include 30 *Fagots/Fishbeds/Floggers/Fitters*, Hunter T 69s, *Moose* and L-29s.

Air defence is based on Soviet SA-2/3/6 SAMs.

Being delivered are 20 Alouette IIIs and more L-39 trainers.

Navy

3,000 men. Three SO-1 submarine chasers, two minesweepers, ten 'Osa' Class patrol boats with Styx SSMs, 12 P-6 MTBs and four smaller patrol boats.

Army

160,000 men. Four armoured, two mechanised infantry and four infantry divisions, one armoured, one Republican Guard mechanised, two infantry and one special forces brigades.

Reserves

250,000.

Para-Military Forces

Security Troops — 4,800; People's Army — 50,000.

Equipment

Either French or Russian and includes 1,350 T-62s, T-54/-55s, 50 T-34s, some AMX-30 medium tanks, 100 PT-76 light tanks, 1,800 APCs (BTR-40/-50/-60/-152, OT-62) and 100 BMP MICVs). Artillery pieces are 700 75 mm, 85 mm, 100 mm, 122 mm, 130 mm and 152 mm guns or howitzers; 50 SU-100 and 40 ISU-122 SP guns; 120 mm and 160 mm mortars and BM-21 rocket launchers.

Anti-tank missiles include Sagger and SS-11 ATGWs. Missile artillery consists of 20 Frog-7 and Scud-Bs.

AA guns are 800 23 mm, 37 mm, 57 mm, 85 mm and 100 mm towed pieces and ZSU-23-4, ZSU-57-2 SP guns together with SA-7 SAMs.

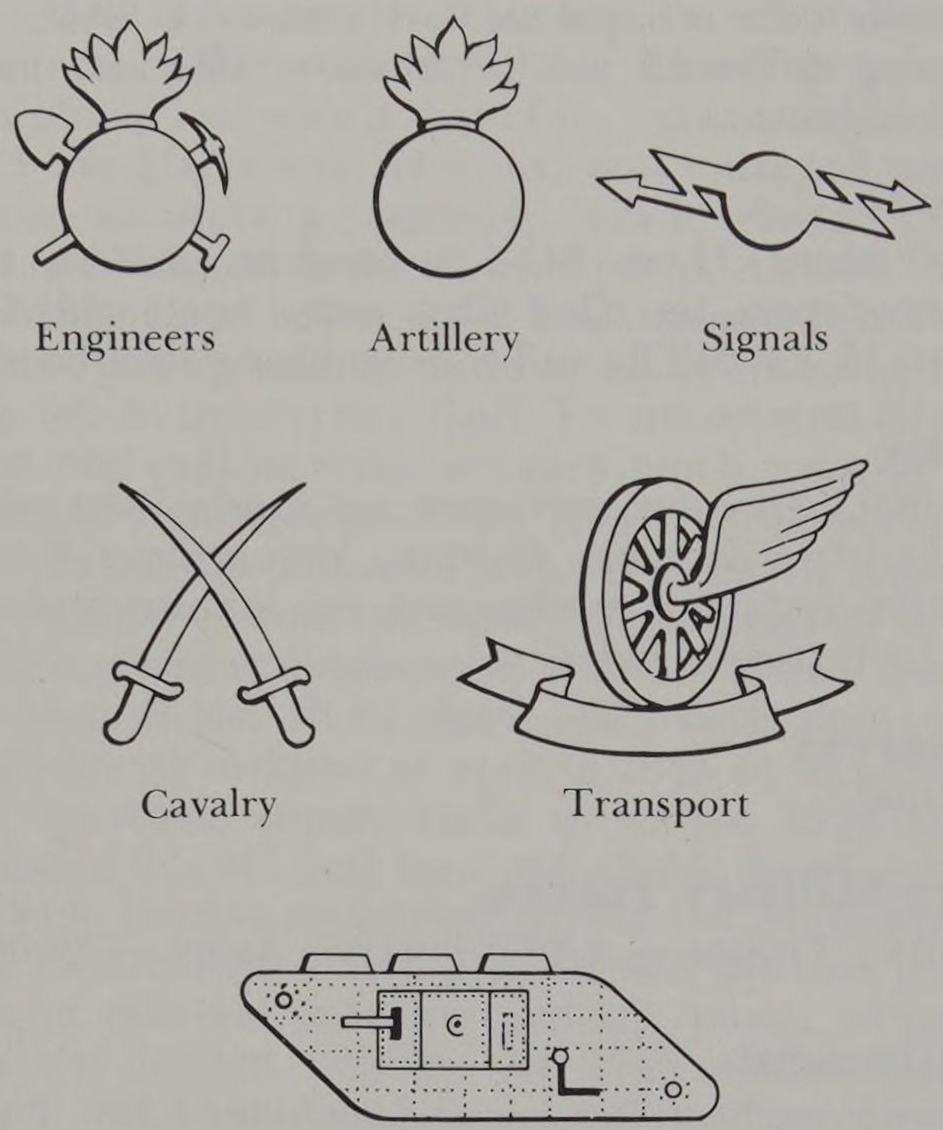
More T-62 tanks and Scud SSMs have been ordered.

Army uniforms

Soldiers: *Summer dress:* Blue or khaki beret with eagle badge; khaki shirt and trousers, web belt and gaiters, black boots. *Winter dress:* As above but with khaki battledress blouse.

Officers: As for the men; they also wear khaki side caps with the badge on a flap at the front centre and for walking out and parades wear khaki service dress and black shoes. Shoulder boards are in the facing colour, buttons, rank badges gold and collar (regimental) badges gold.

Regimental badges (brass, all within a wreath having a scroll across its base. Worn on the collar by officers): *Armour:* A World War 1 British tank, black facing. *Artillery:* A bursting grenade, dark blue facing.



Iraqi Army collar badges

Engineers: A bursting grenade on a pick and shovel, light blue facing. *Signals:* A lightning flash, light blue facing. *Infantry:* Crossed scimitars, dark green facing. *Medical and veterinary:* Serpent and staff within a wreath, maroon facing. *Pharmacy:* A wreath, black facing. *Transport:* A winged wheel over a scroll, brown facing. *Ordnance:* A shield within a wreath over a scroll, light green facing. *Cavalry:* Crossed lances with pennons, grey facing.

The cap badge is the gold eagle with on its breast a shield in red, white and black; on the white, central portion, three gold, five-pointed stars.

Badges of rank: Until the overthrow of the monarchy the officers' rank badges were almost as for the British Army but with the national crown and seven-pointed stars. The eagle has now replaced the crown; ranks from Major General upwards wear crossed sabres and above them (in ascending order of seniority) a star, an eagle, an eagle over a star, an eagle over two stars.

Soldiers' rank badges consist of red diagonal bars on the upper sleeve (lower end to the front) as follows: *Lance corporal:* One stripe. *Corporal:* Two stripes. *Sergeant:* Three stripes. *Staff Sergeant:* Three stripes under an eagle. *Sergeant major:* Four stripes. *Warrant Officer:* An eagle on the cuffs.

History of the Army

During World War 1 the British occupied Mesopotamia (as it then was) and raised a body of about 2,000 camp guards. In 1919 these guards were reformed into the Iraq Levies and given a more military organisation and training. After the revolt of 1921 they were again reformed and the Arabs excluded from their ranks, recruitment being only among Kurds and Assyrians. These Iraq Levies came directly under Royal Air Force command as it was the RAF who were responsible for security in Iraq.

In 1921 a totally separate military organisation, the Iraq National Army was set up under British Army patronage with an initial strength of about 3,500, mostly Kurds. Iraqi officers attended training courses both in Britain and India. In 1934 the British mandate for Iraq ended and conscription was included in the new national constitution but not introduced until 1936. By 1941 and the anti-British revolt, Army strength was about 41,000 men but by May 1948 it had been reduced to about 20,000 and this included an armed gendarmerie. British weapons were supplied under a treaty involving use by the RAF of the bases at Habbaniya and Shaiba.

National history

In recent times Iraq was part of the Ottoman Empire until its collapse at the end of World War 1 when it came under British occupation and mandatory rule. In 1932 it achieved independence as a monarchy under King Feisal but in 1933 the Assyrian Christian minority rose in revolt against state repression and caused the government to fall. King Feisal died in 1933 and was succeeded by his son, King Ghazi whose reign was troubled by political intrigues and tribal rivalry. From 1936 the Army dominated domestic policies but were swept from power in May 1941 after being defeated by a British expeditionary force.

King Ghazi was killed in a car accident in 1939 and was succeeded by his son, Feisal II who was only four years old then; his uncle — Amir Abd al Llah — was appointed regent for the next 14 years and co-operated with the British, declaring war on the Axis powers. He was also in favour of the introduction of parliamentary democracy and the formation of political parties but when they were introduced in 1946 the infant democracy soon went astray and General Nuri overthrew the new government within a few months and became Prime Minister himself. The political parties boycotted his elections; Nuri resigned in March 1947 and Jabr (a Shii) took his place. In 1948 he went to London to renegotiate the 1930 Anglo-Iraqi treaty governing use by Britain of the air

Above *The first Israeli tanks to cross the Suez Canal to Egypt on floating craft before the bridge was built (Keystone Press Agency Ltd).* **Below right** *Egyptian troops of the 3rd Army loading supplies on Russian-built amphibious craft for ferrying across the Suez Canal (Keystone Press Agency Ltd).*





Above left *Persian Gulf States Cap Badges: Top row (left to right) Qatar Defence Force, Union Defence Force, Abu Dhabi Defence Force. Second row (left to right) Dubai Defence Force, Sharjah National Guards, Kuwait Army. Bottom row (left to right) Union Defence Force; Mechanised Battalion; Bahrain Defence Force.* **Above right** *Sultanate of Oman: Top row (left to right) Shoulder title – Desert Regiment, brass on deep yellow; Crown (silver and red), worn by various ranks; Shoulder title – Muscat Regiment, brass on red. Second row (left to right) Shoulder title – Northern Frontier Regiment, brass on dark green; Cap badge; Shoulder title – Army HQ and Services (no backing). Bottom row (left to right) Shoulder title – Jebel Regiment (brass, no backing); Officers' star badge – brass; Shoulder title, Gendarmerie – worn on a navy blue slide.* **Below left** *Trucial Oman Scouts, Officers' silver embellishments. Top to bottom, cap badge, collar badges, buttons.* **Below right** *Iraqi Army Badges: Top row (left to right) Officers' (cap), Soldiers' (cap). Bottom row (left to right) Infantry (collar), Cavalry (collar).*

Above far right *Egyptian T-54 brewed up in Sinai fighting (Keystone Press Agency Ltd).* **Below far right** *Israeli M-60 tanks in the front line during an engagement at the Mitla Pass in Sinai (Keystone Press Agency Ltd).*









Above *The Beau Geste flavour of garrison life in Sharjah is very strong as a British officer of the Trucial Oman Scouts scans the horizon from the tower of the fort (J. Esson).* **Below** *25-pounder gun drill in Oman (*Soldier *magazine).*

base at Habbaniya and this was signed on January 15 that year but was repudiated by the Iraqi populace who were very pro-Palestinian Arab at that time. The uproar forced Jabr's resignation and Nuri returned to power. In 1952 renewed public disorders led to a period of martial law. King Feisal II came of age and assumed power but the former regent was reluctant to relinquish the reins and continued to meddle behind the scenes. During the 1950s oil exploitation led to a sudden flow of wealth into Iraq and irrigation and hydro-electric schemes were completed on a large scale.

The Iraqi Government had been opposed to the formation of the Egypt-Syria United Arab Republic but they were out of touch with the Iraqi masses who applauded the rise of pan-Arabism and were also anti-West in sentiment.

Repressive government measures led certain young Army officers to form the 'Free Officers Movement' and they worked towards change by revolution. Head of the Movement was Brigadier Abd el Karim Qasim who, on July 14 1958, seized control of Baghdad with two brigades that had been ordered to move to Jordan to support that Army in the war against Israel. King Feisal and the ex-regent were among many of the royal family murdered in the coup, as was General Nuri. A council of sovereignty of three was formed to rule and Qasim became Chairman of the Cabinet, Defence Minister and Commander in Chief of the Iraqi forces. Public declarations boasted 'Arabs and Kurds are considered partners in this homeland' which was declared an Islamic republic. Squabbles soon developed within the new ruling group; Qasim — a most powerful man — based his strength on support of the Army, the Kurds, Communists and others and was for national identity; his leading opponent (Brigadier Arif) favoured joining the UAR.

Qasim survived plots and intrigues, ousted Arif and even countered dissident nationalists with Communist support. In June 1961, to divert internal disquiet from himself, he claimed Kuwait which brought a British task force scampering up the Persian Gulf to support Kuwait, Iran and other Arab states against this Iraqi expansionism. Qasim wooed Soviet support and received much aid including large quantities of military hardware but in February 1963 the Ba'ath party, together with an Army faction, started a rebellion, Qasim's regime collapsed and he was executed. The Ba'athists assumed power, Abd as Salam Arif (an officer retired by Qasim) became President and Colonel Ahmed Hassan al Bakr became premier. The Communists were now persecuted, but on November 18 1963 President Arif, supported by the Army, arrested the Ba'athist leaders and became real ruler until his accidental death in April 1966. Prior to this he had asked a lawyer, Abd ar-Rahmann al Bazzaz, to form a civilian government as he saw that military regimes had no long-term future. Unfortunately, Bazzaz was then forced to resign and the military reigned until 1968 when the Ba'ath party staged a coup and removed Arif from power. Ahmed Hassan al Bakr became President.

The Kurdish question

Although of the Sunni Muslim sect, the Kurdish minority had little in common with the Arab Sunnis who lived in the borders of modern Iraq with their numerically equal Arab Shiiah compatriots who together formed about 80 per cent of the population. Kurdish nationalist spirit thus grew and they supported the military coup in 1958. They formed their own political party to press their claims for independence but Qasim did little to help them when he was in power.

In June 1961 a minor clash took place in Ranyah — a small Kurdish town—between the Iraqi Army and some Kurdish tribesmen. This developed into a long and bitter war between Iraqi Arab and Kurd, the latter led by Mullah Mustafa of Barzan. At Qasim's overthrow in 1963 Mustafa offered the new leaders a cease-fire but no agreement for a political settlement was reached and fighting soon recommenced with the Iraqi Army suffering heavy losses. Bazzaz negotiated an agreement with the Kurds on June 29 1966 but fell from power too soon for it to be ratified and his successors repudiated his guarantee of Kurdish rights. Fighting continued (with help for the Kurds coming from Iran and passive support from Turkey) and erupted in 1974 when 300 Iraqi tanks pushed into Kurdistan and took Raniya, Qala Diza and Rawanduz. The Kurds fought back with 122 mm field guns and wire-guided ATGWs and enjoyed artillery support from over the Iranian border. It was said that Soviet pilots flew on the heavy air raids with which the Iraqi Air Force crushed the Kurdish people and it is alleged that napalm and phosphorous bombs were used. 130,000 Kurdish refugees fled to Iran, 5,000 to Turkey but in July 1974 Turkey closed her borders to the Kurds and on March 6 1975, the Iraqi-Iranian Governments reached agreement whereby they ceased to meddle in each others' internal affairs; Iranian forces withdrew from Kurdistan and on March 7 the Iraqi Army opened its final offensive against the rebels, announcing an amnesty to all who surrendered. A cease-fire was called on March 13. Mullah Mustafa and many others fled into Iran. Quiet descended but in May-June 1976 the Pesh Merga guerrillas (military wing of the Democratic Party of Kurdistan (DPK)) again attacked Iraqi forces in protest at forced deportation of Kurds to southern Iraq. The sore still festers.

Israel

Population	—	3.6 million
Estimated GNP	—	$12.6 billion
Defence budget 1975	—	$4.3 billion

Armed Forces

Jews and Druses are liable to compulsory military service (36 months for men, 24 months for women) but Christians and Moslems may volunteer. Following their conscription, men are liable for annual military refresher training until the age of 54, women until 25. Embodied armed forces in peacetime number 164,000, the vast majority of whom are conscripts (123,000) mainly serving with the Army. Reservists bring another 460,000 into the ranks, 400,000 of these within 72 hours of mobilisation. About 80 per cent of the male recruit potential and about 55 per cent of the female recruit potential are actually conscripted.

Air Force

21,000 men in peacetime, including 2,000 conscripts who are employed in the air defence sections; a further 4,000 reservists are added on mobilisation. There are 549 combat planes in the first line with others, including 25 Mystère IV As, in reserve.

Twelve fighter squadrons with an interceptor role (five F-1Ss, 165 F-4Es, 30 Mirage III CJ/BJs, -44 Kfir/Kfir C2s); six FGA squadrons (235 A-4E/H/M/Ns with Skyhawks); a reconnaissance squadron (12 RF-4Es and two EV-1s).

Transport command has ten Boeing 707s, 24 C-130E/Hs, 12 C-97s, 20 Noratlases, ten C-47s, two KC-130Hs, 14 Aravas, 15 DO-28s, ten Islander transport planes as well as ten DO-27s, 25 Cessna U-206s and two Turbo-Porter light planes..

Trainers include 24 TA-4Hs, 80 Magisters, Mystère IVs and Super Mystères, 20 Queen Airs and 20 Super Cubs.

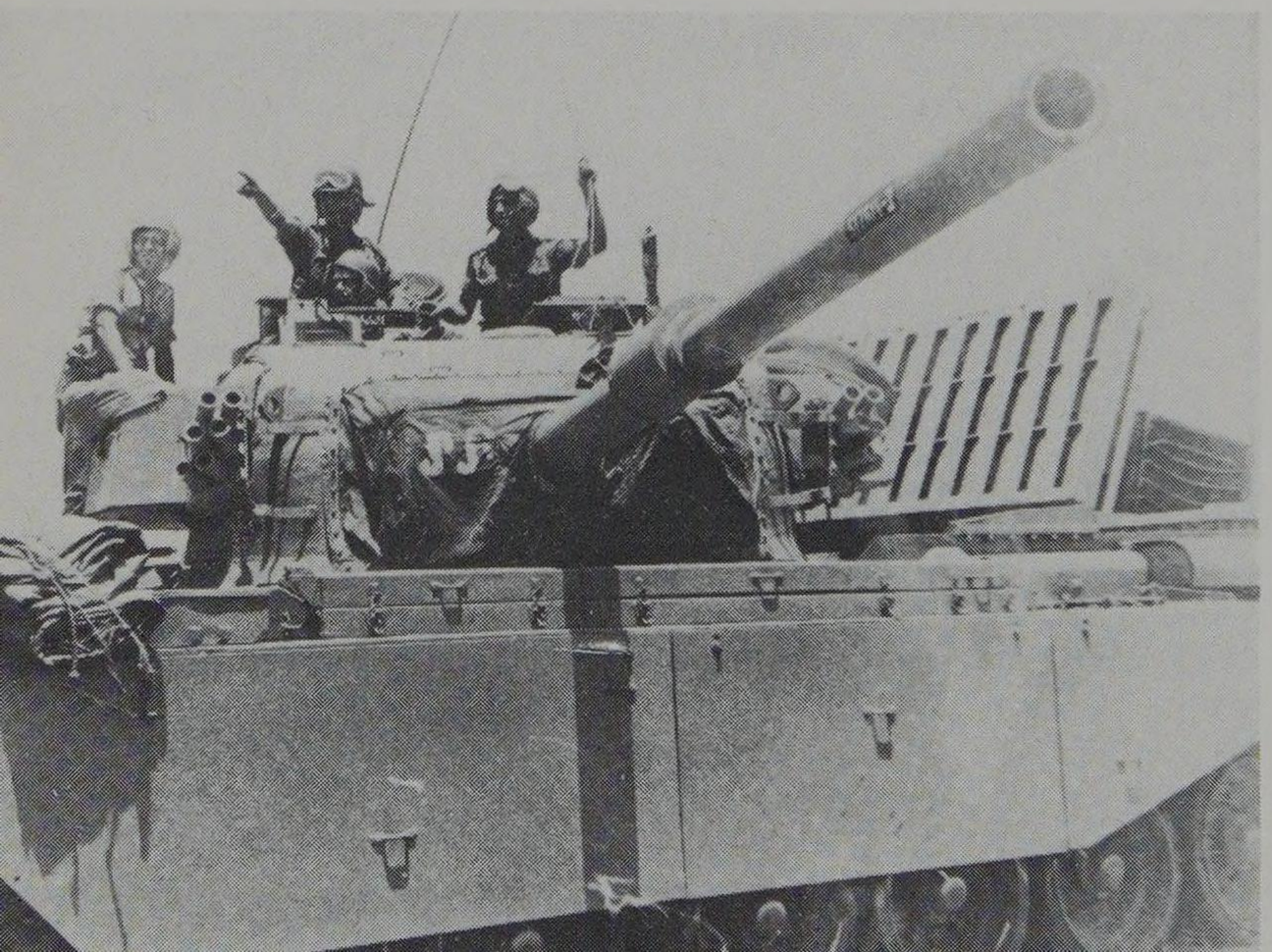
Helicopters include 12 Super Frelons, 28 CH-53Gs, six AH-1Gs, 40 AB-205As, 25 AB-206s, 30 UH-1Ds, 15 S-65s and 30 Alouette II/IIIs. Air defence has 15 batteries with 90 Hawk SAM launchers. Being bought are 20 F/TF-15A interceptors, 35 F-4 ground attack fighters and four E-2C airborne early warning planes as well as Sidewinder AAMs.

Navy

5,000 men in peacetime (with 300 men in a marine commando), including 1,000 conscripts; a further 1,000 reservists are added on mobilisation.

Six 'Reshef' Class and 12 'Saar' Class patrol boats all with Gabriel SSMs; about 40 smaller patrol craft; 12 landing craft, one Type 206 submarine.





Top *Israeli SP 155 mm howitzers on the Super Sherman chassis* (Christopher F. Foss). **Above** *An Israeli SP 155 mm howitzer* (Christopher F. Foss). **Below** *An Israeli Centurion. Note the open engine louvres. This tank does not show the usual Israeli battalion and company markings* (Christopher F. Foss).

The naval air service has three Westwind 1124N reconnaissance planes.

Two more submarines, seven 'Reshef' Class patrol boats and Harpoon SSMs are on order.

Army

138,000 men in peacetime including 120,000 conscripts both male and female; strength rises to 375,000 on mobilisation. There are no divisions within the Israeli Army, the brigade is the largest formation in constant existence. Twenty armoured brigades (five at full strength, one at half-strength, 14 at cadre strength), nine mechanised infantry brigades (four at about half-strength, seven at cadre strength); nine infantry brigades (four at full strength, five at cadre strength); five parachute brigades (two at full strength, one at near half-strength, two at cadre strength).

Reserves

237,000 first line, 223,000 second line.

Para Military Forces

Border Guards — 4,500; Nahal Militia — 5,000.

Equipment

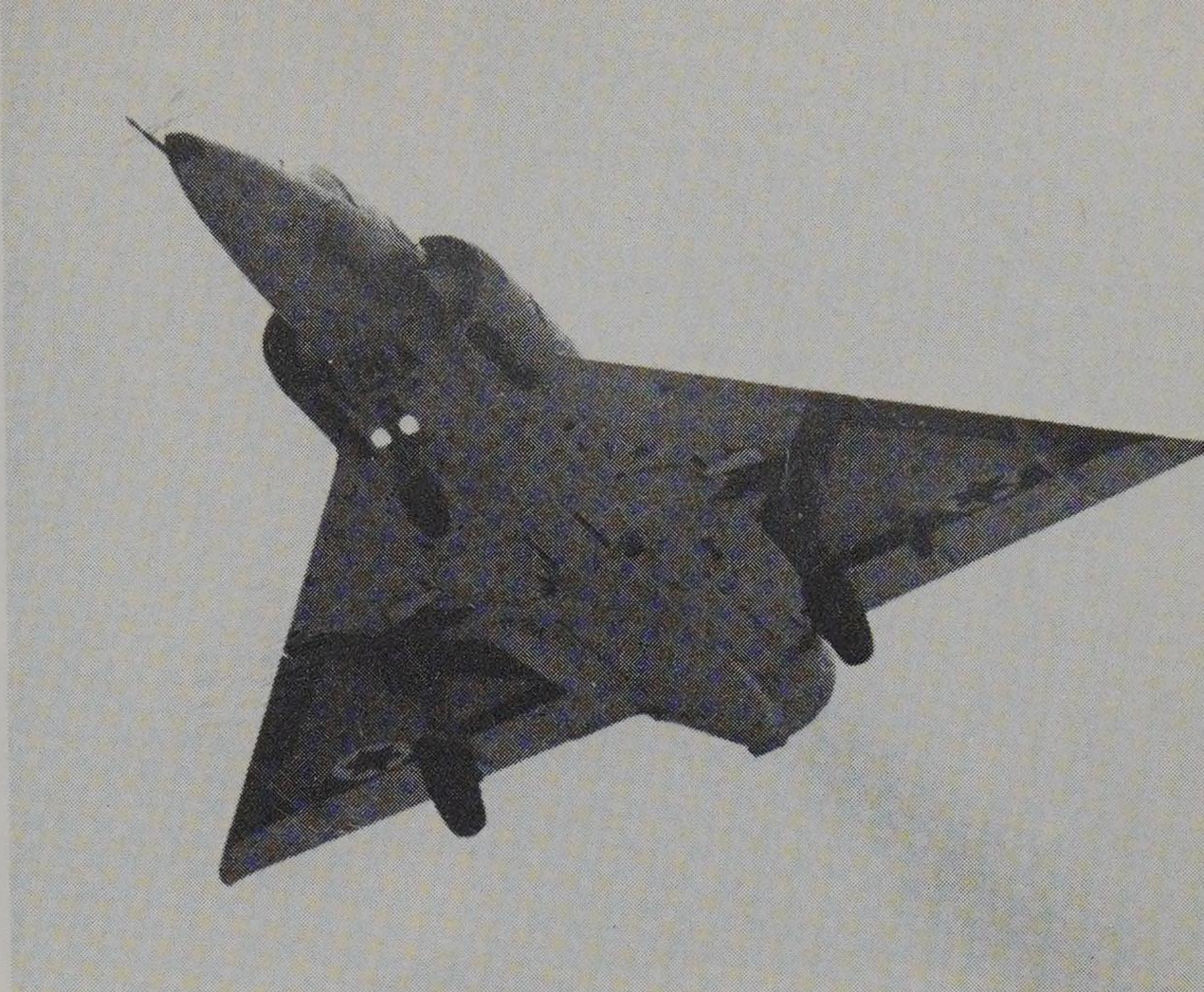
Israeli Army equipment is an interesting collation of intentional and fortuitous acquisitions, that of western manufacture having been planned in, the Warsaw Pact equipment being the spoils of the various wars with their Arab neighbours. Small arms are mainly NATO type but include a range of home-produced weapons.

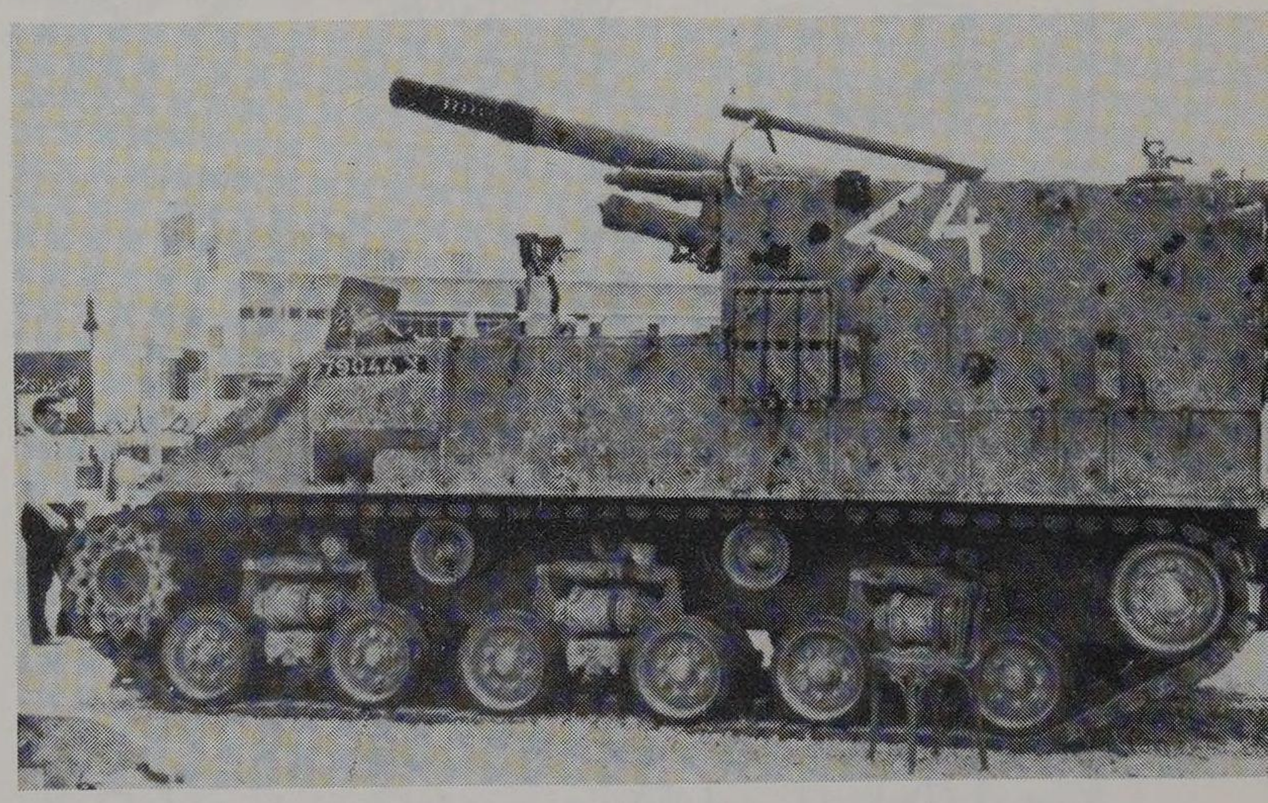
Main battle tanks include 1,000 Centurions, 650 M-48s, 810 M-60s, 400 T-54/-55s, 150 T-62s and some old Chariots. There are 65 PT-76 light tanks and some 3,600 other armoured fighting vehicles (AML-60s, AML-90s, RBY Ramta armoured cars). Additionally they have about 4,000 American M-2, M-3 half-tracks, M-113 APCs and Soviet BRDM, BTR-40/-50P (otherwise known as the OT-62)/-60P/-152 APCs.

Artillery includes 500 105 mm, L-354, M-109 and 155 mm howitzers; 60 175 mm and some 203 mm SP howitzers; 450 120 mm, 122 mm, 130 mm and 155 mm guns and howitzers. The American Lance and the Israeli Ze'ev (Wolf) SSMs and the 122 mm, 135 mm and 240 mm rocket launchers complete the artillery and in addition there are some 900 81 mm, 120 mm and 160 mm mortars, some of which are self-propelled.

The anti-tank artillery includes Sagger, Cobra, Dragon, TOW, SS-11 ATGWs and the 106 mm RCLs.

AA artillery equipment is about 900 Vulcan/Chaparral 20 mm gun and missile systems, a





Top *An Israeli Kfir jet fighter, Mirage frame, US engine* (IDF spokesman). **Above** *An Israeli SP 105 mm howitzer on a Super Sherman chassis. This equipment is from the 2nd Battalion of the 4th Artillery Regiment* (Christopher F. Foss). **Below** *A US-produced Hawk SAM being fired. This equipment is designed for low-to-medium flying targets* (US Marine Corps).




Colonels (Staff Officers)


Generals


Infantry


Armour


Signals


Intelligence


Artillery


Medical Corps


Ordnance


Engineers


Military Police


General Service Corps


Supply Corps


Recruit


Judge Advocate's Branch


Territorial Defence Corps

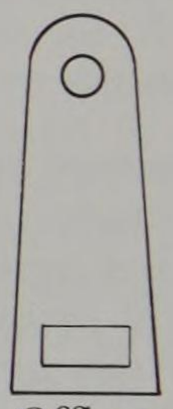

Warrant Officer 2nd Class (Rav-Samal)

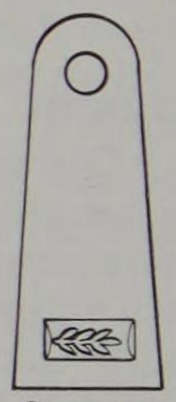

Warrant Officer 1st Class (Rav-Samal-Rishon)

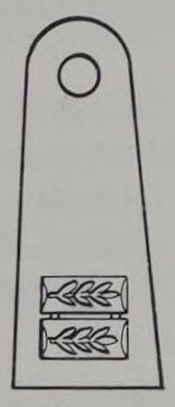

Military Bands

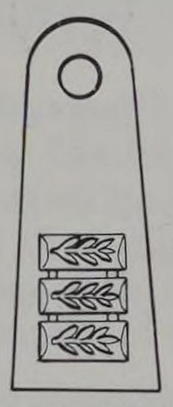

IDF collar badge

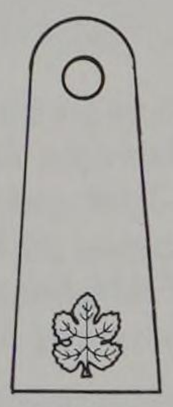

Nahal Pioneering Fighting Youth

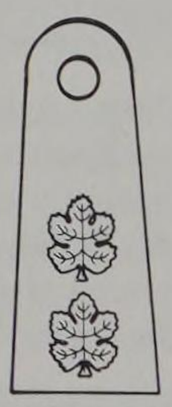

Officer Aspirant (Mamak)


Second Lieutenant (Segen-Mishneh)

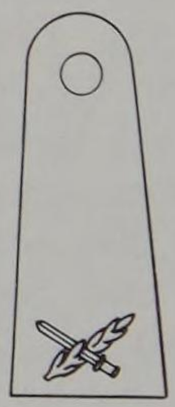

First Lieutenant (Segen)

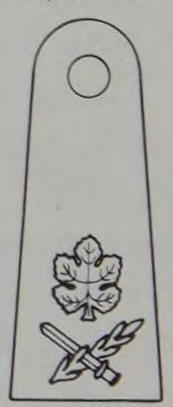

Captain (Seren)


Major (Rav-Seren)

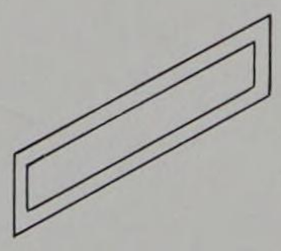

Lieutenant-Colonel (Sgan-Aluf)

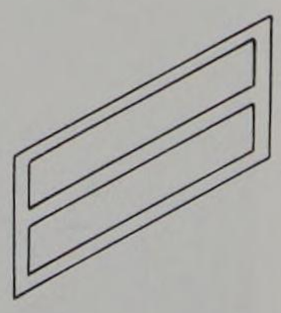

Colonel (Alut-Mishneh)

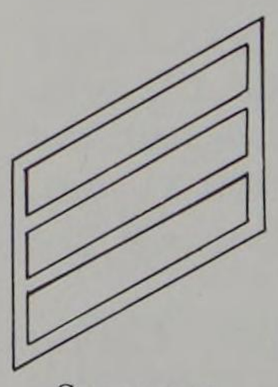

Brigadier (Tat-Aluf)

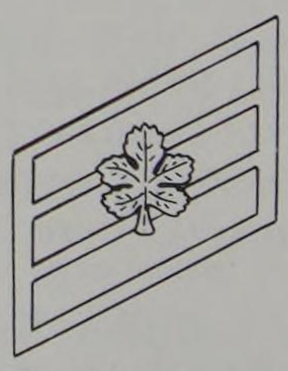

Major General (Aluf)


General (Rav-Aluf)

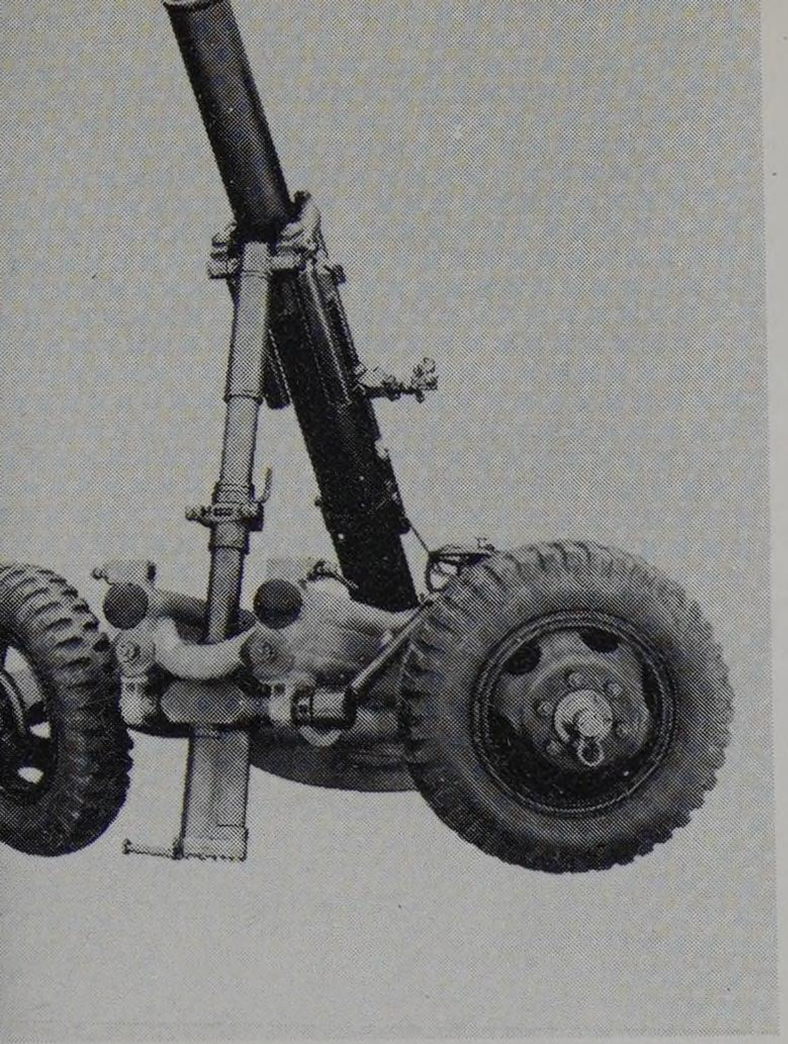

Lance Corporal (Turai-Rishon)

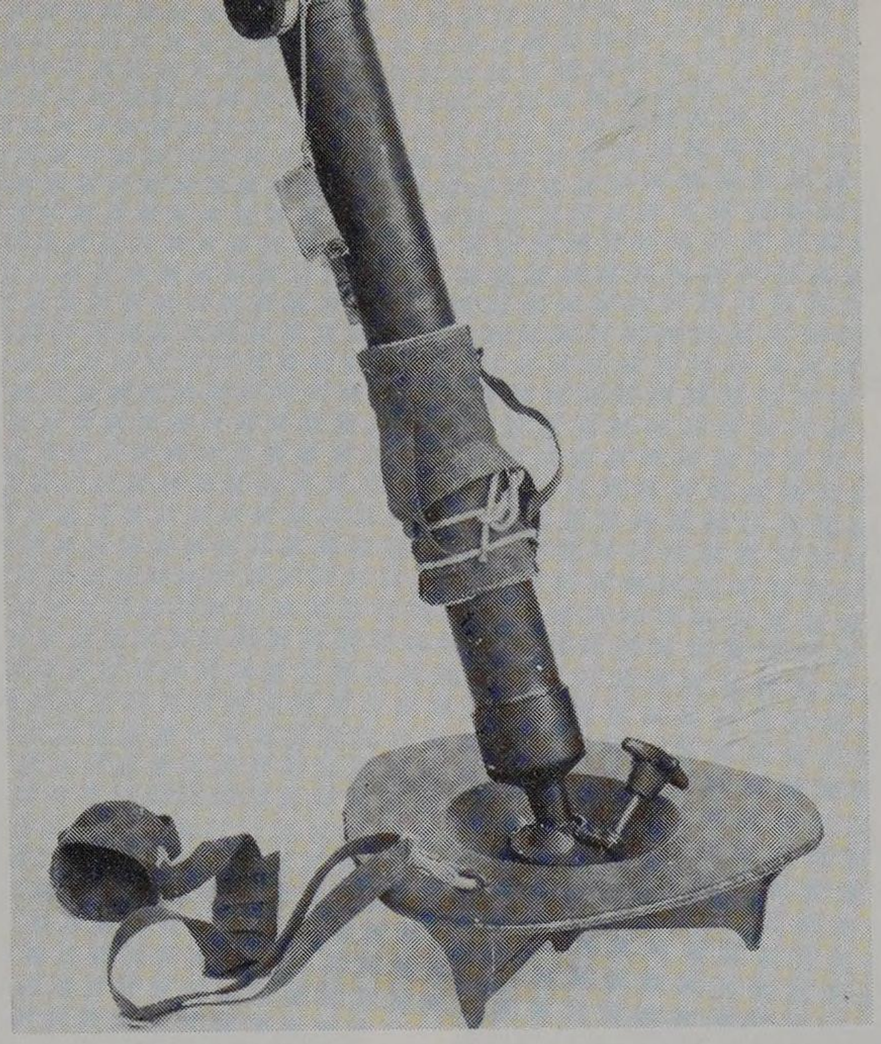

Corporal (Rav-Turai)

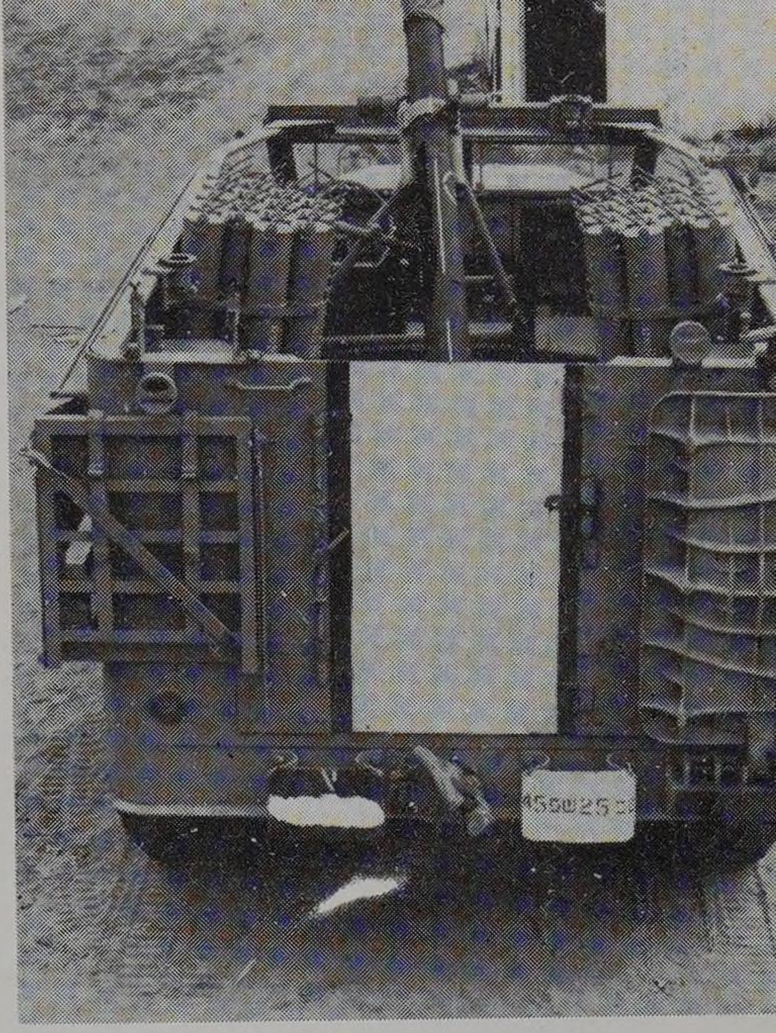

Sergeant (Samal)


Staff Sergeant (Samal-Rishon)

Israeli Army rank and regimental badges







Left *An Israeli Soltam/Tampella 160 mm heavy mortar in the firing position* (Christopher F. Foss). **Centre** *An Israeli 60 mm mortar with base plate but without bipod* (Israeli Military Industries). **Right** *An Israeli SP mortar in a US-built half-track. Note the white-painted rear door to aid convoy driving at night without lights* (Christopher F. Foss).

quantity of 30 mm and 40 mm guns and Redeye SAMs.

The Israelis are awaiting delivery of 125 M-60 tanks, 700 M-113 APCs, 94 155 mm howitzers and 175 mm guns, more Lance SSMs and more TOW ATGWs.

Army uniforms

Officers and men wear khaki shirts and trousers, and berets coloured according to arm of service (*paratroops:* red; *armour:* black; *others:* khaki), with regimental/Corps badges; the Army badge is worn on the collar on parades. Khaki web equipment, black boots. For officers there is also a service dress jacket; khaki, four-button front, four patch pockets. Military police wear white web equipment and peaked caps with black visors and chin straps. Badges of rank are worn on the upper arm (other ranks), the cuff (warrant officers) or the shoulder (officers).

In combat dress a US-style glassfibre helmet with ballistic properties superior to steel of equivalent weight is worn, usually under a camouflage net and with a red recognition headband. The web equipment is US-style.

Badges of rank (bronze, worn on the shoulder): **Officers:** *Lieutenant General (Rav-Aluf)*:* Two fig leaves over crossed sword and olive branch. *Major General (Aluf)*:* One fig leaf over crossed sword and olive branch. *Brigadier (Tat-Aluf)*:* Crossed sword and olive branch. *Colonel (Aluf-Mishneh):* Three fig leaves. *Lieutenant-Colonel (Sgan-Aluf):* Two fig leaves. *Major (Rav-Seren):* One fig leaf. *Captain (Seren):* Three bars, each with an olive branch pattern. *First Lieutenant (Segen):* Two such bars. *Second Lieutenant (Segen-Mishneh):* One such bar. *Officer Aspirant (Mamak):* A silver bar.

Warrant Officers (worn on the cuff): *1st Class (Rav-Samal-Rishon):* The Army badge (sword and olive branch on a star within a laurel wreath). *2nd Class (Rav-Samal):* A fig leaf within a star within a laurel wreath.

Soldiers (diagonal white bars worn on the upper sleeve): *Staff Sergeant (Samal-Rishon):* Three bars with a superimposed fig leaf. *Sergeant (Samal):* Three bars. *Corporal (Rav-Turai):* Two bars. *Lance-Corporal (Turai-Rishon):* One bar.

Regimental badges (bronze, worn on the cap; 'wreath and scroll' = within a laurel wreath and over a scroll): *Generals and Colonels:* Vertical sword and olive branch on a laurel wreath. *Staff officers:* Vertical sword and olive branch on the Star of David over a scroll. *Armour:* A tank (side view), wreath and scroll. *Artillery:* A howitzer, wreath and scroll. *Engineers:* A vertical sword behind a tower in a 12-pointed star over a scroll. *Signals:* A winged vertical sword between two lightning flashes, wreath and scroll. *Infantry:* Vertical sword and olive branch, wreath and scroll. *Intelligence:* A fleur-de-lis within oak leaves over a scroll. *Medical:* A serpent around a staff under the Star of David, wreath and scroll. *Ordnance* (repair, maintenance and ammunition): Vertical sword, flaming grenade, cog wheel, wreath and scroll. *Supply:* Sword, horse and chariot, crossed ears of barley,

*NB The rank of Brigadier was introduced in 1969 when the two senior ranks were each elevated one grade to accommodate it.

scroll. *Military Police:* Flaming torch, scroll. *General Service Corps:* Fig leaf over crossed swords, wreath and scroll. *Territorial Defence Corps:* Sword, crossed rifles, wreath and scroll. *Judge Advocate General's Branch:* Sword, scales, wreath and scroll. *Military Bands:* A lyre, crossed horns, wreath.

Collar badges: All ranks wear the bronze Army badge (as for staff officer's cap badge) on the lapels.

Israeli war medals (worn on the left breast): **Decorations for valour:** *Ot Gibur Yisrael* (Hero of Israel): This decoration lapsed at the beginning of the 1970s; on a red band over the gold embroidered, seven-stemmed candelabra within laurel branches over the Hebrew 'Israel'.

In January 1970 the Knesset passed new laws regarding decorations; these, in descending order, are as follows: *Itur Hagvura* (Medal for valour): On a yellow band the bronze Star of David with sword and laurel branch. *Itur Haoz* (Medal for courage): On a red band six crossed swords behind a laurel branch. *Itur Hamophet* (Medal for exemplary conduct): On a dark blue band a round bronze disc with vertical sword and laurel branch.

Campaign medal ribbons (40 mm wide; no medals are worn): *1948:* Dark blue-white-light blue-white-dark blue-RED (central stripe)-dark blue-white-light blue-white-dark blue. *1956:* Orange-dark blue-red-LIGHT BLUE-red-dark blue-orange. *1967:* Red-dark blue-white-LIGHT BLUE-white-dark blue-red. *1973:* Dark blue-white-dark blue-white-RED-white-dark blue-white-dark blue.

War wounded insignia (worn on the left breast pocket): in bronze a vertical sword, laurel branch and rose with thorns.

Skill at arms badges: *Parachutists* (worn on the left breast, over the medals. This system was introduced into the Israeli Army by Moshe Dayan following a visit to the USA in July 1954. All officers must achieve this badge): *Master parachutist:* In silver a parachute within wings, over the parachute, laurel branches and the Star of David. *Parachutist:* As above but without laurels and Star. *Commando badge:* A horizontal bowie knife, behind it the rising sun in bronze. *Ranger badge:* In bronze a flaming grenade on a vertical sword, all on a shield between bat's wings. *Marksman:* A rifle lying across a target with the muzzle to the top right hand corner. *Sniper:* Crossed rifles under a hair-line sight.

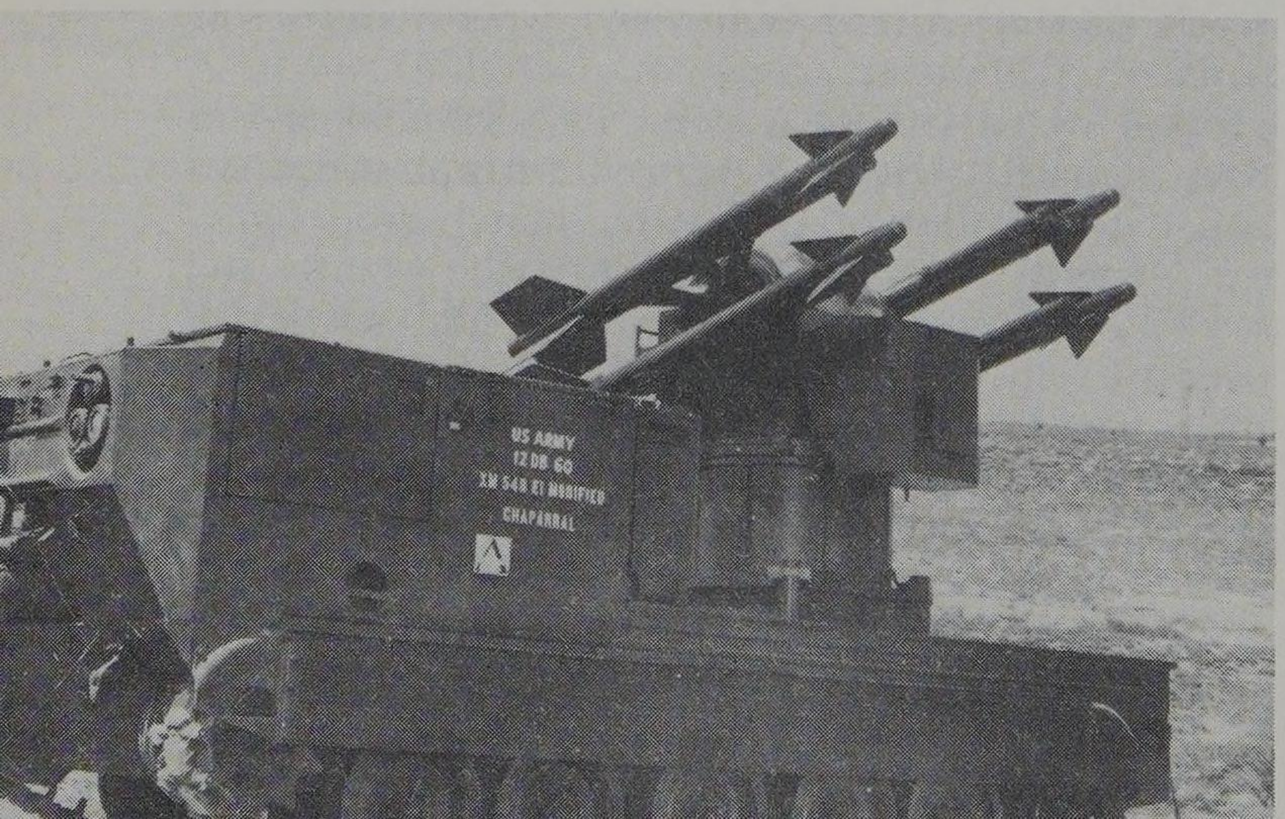
History of the Army and the nation

The origins of the Haganah go back to pre-World War 1 days when a Home Guard organisation, Shomerin, was raised to protect villages against Bedouin raids. In 1907 this was expanded into the Hasomer (Watchmen) and included many Russian Jews expelled in the pogroms of 1905.

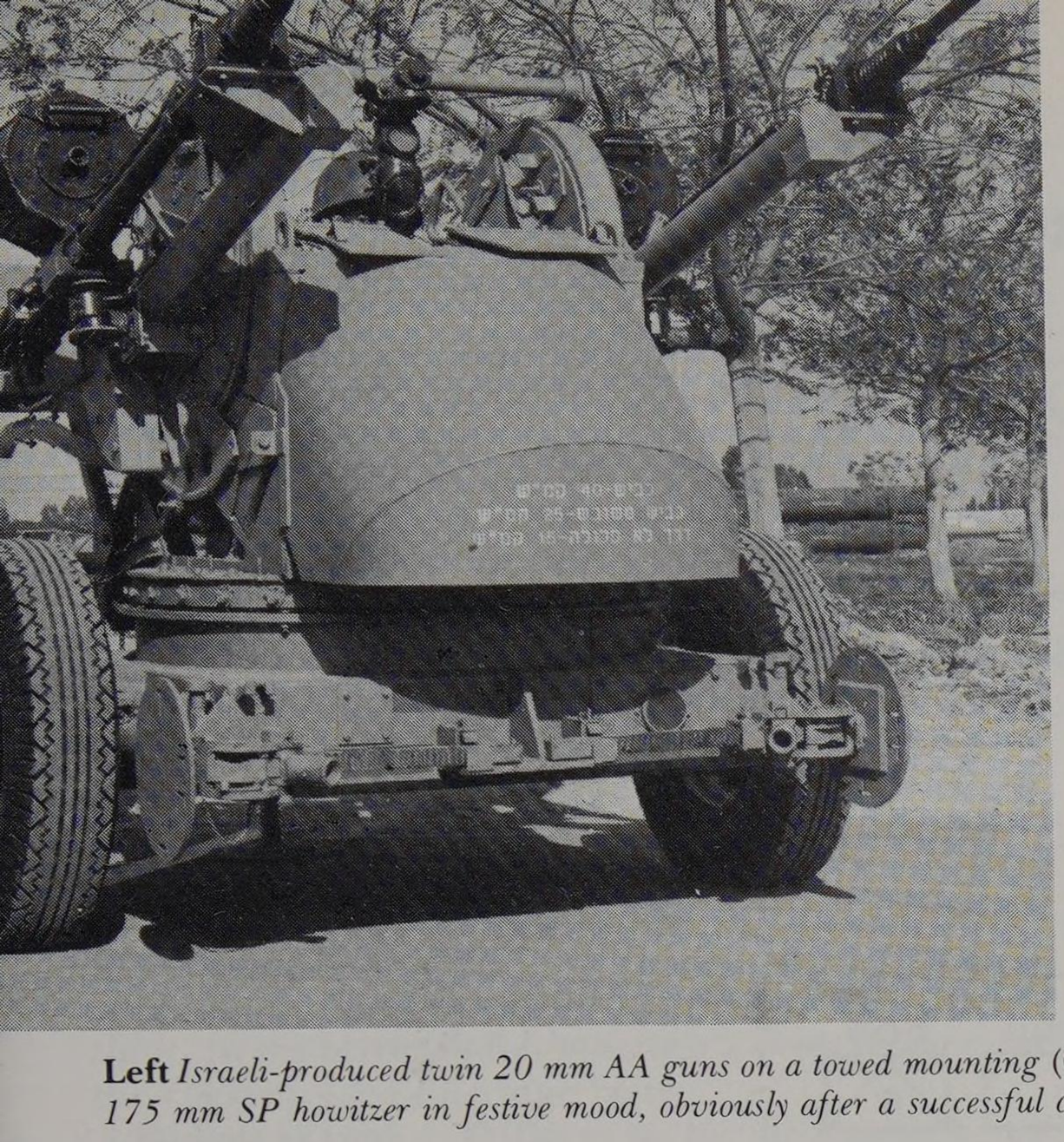
After the Balfour Declaration the Hasomer was itself expanded into the Haganah (Jewish Defence Organisation) which was ostensibly still a police or internal security organisation but had a full-time staff controlling it. Under the British mandate of Palestine it was known as the Jewish Settlement Police. During World War 1 many Hasomer members served with the British Army and prior to World War 2 Orde Wingate — later legendary founder and leader of the 'Chindits' in Burma — did much to improve the tactical and organisational efficiency of the Haganah in their struggle with the Mufti of Jerusalem's Arabs. During World War 2 large numbers of Haganah men served in the British Army. In particular the allied invasion of Vichy-French Syria was reconnoitred by Moshe Dayan, later General and Israeli Defence Minister.

In May 1941 a special forces section of the Haganah was set up and entitled the Palmach (Spearhead Detachment); it was an élite formation. By 1947 it is estimated that Haganah strength may have been as high as 60,000 men and included many who had served in the Allied Armies thus gaining valuable battle experience. Of the Haganah about

Left *A US-produced Chapparal SAM. This mobile AA system is designed for low level air defence* (Christopher F. Foss). **Right** *The new Israeli RBY four-wheel drive reconnaissance vehicle. The design is intended to minimise risks to crew members if the vehicle should run on to a mine — thus the long wheel base and the shaped bottom of the truck* (Christopher F. Foss).









Left *Israeli-produced twin 20 mm AA guns on a towed mounting* (Christopher F. Foss). **Right** *An Israeli-crewed, US-produced M-107 175 mm SP howitzer in festive mood, obviously after a successful campaign* (IDF spokesman).

3,000 were in the Palmach (fully mobilised) and there was then the Field Army, the Home Guard and the Youth Battalions.

The Palmach consisted of five battalions whose members were the pick of the eligible population (which excluded orthodox Jews who are pacifists) and were given regular political as well as martial instruction. Chief of staff was Ygal Alon who later became its commander.

The Field Army was organised on a regional basis and consisted of part-time soldiers, perhaps 10,000 in all. It was a defensive organisation but had a degree of mobility. The Home Guard (Mishmar Ha'am) embraced all other adults capable of carrying and using weapons in their own defence. In practice, weapons were initially so scarce that only a small percentage were armed.

The Youth Battalions, several in number, catered for boys of about 17 years of age and were a type of cadet unit.

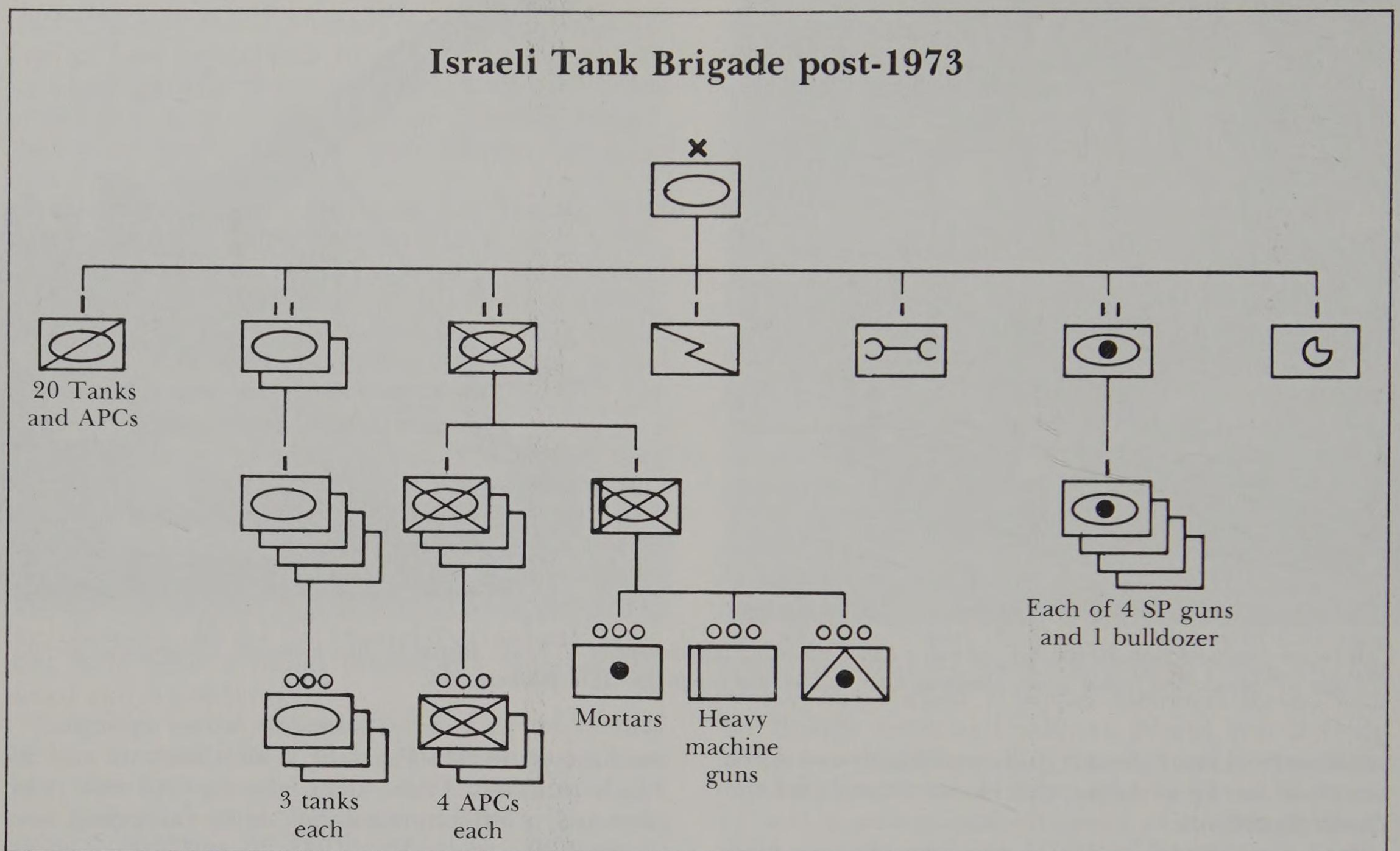
Apart from the Army, the Haganah also contained tiny naval and air elements. In 1948 its commander was Israel Galil, its chief of staff Zvi Aylon.

For defensive purposes Israeli-held land was divided up into brigade areas, commanders of which were responsible for security and defence and for command of forces within their areas.

Weapons and equipment were extremely scarce on the Israeli side in 1948 and were mainly limited to small arms: 10,000 rifles, some pistols and Sten guns, 450 light machine guns (LMGs), 180 medium machine guns (MMGs), 670 2 inch mortars and 96 3 inch mortars. There were also two 65 mm field guns and a little ammunition. Arms smuggling was resorted to and by May 1948 20 anti-aircraft guns arrived, being the first batch in an ever-growing flow of military hardware. Self help produced the 'Little David' light mortar and various grenades, mines and bombs as well as improvised armoured cars. Two Cromwell and two Sherman tanks were also 'acquired' and 21 Auster light aircraft were bought from the British; these were later used as bombers with 50 kg home-made bombs.

Apart from the Haganah there were two terrorist groups, the Irgun Zvai Leumi (IZL) (National Military Organisation) and the Stern Gang which agreed to act with the Haganah while maintaining their independence. The IZL was founded in 1937 by David Raziel and Abraham Stern; Raziel was killed in the British forces in World War 2 and in 1948 it was commanded by Menachem Begin (now Israeli Prime Minister) who came out of Poland with General Anders' Polish Army. The IZL was an extremist political group of 800 armed members, largely of east European ancestry. They operated mainly in Jerusalem and Tel Aviv.

Abraham Stern had broken away from the IZL in 1941 and founded the 'Fighters for the Freedom of Israel'. The cause of the split was the IZL's moderate action in suspending terrorist activities against the British during World War 2. In 1948 its leader was Nathan Friedmann-Yellin, a Pole. It consisted of about 300 armed members and over 2,000 active supporters.



The Hashemite Kingdom of Jordan

Population	—	2.89 million (including 550,000 Palestinian refugees)
Estimated GNP 1976	—	$1.3 billion
Defence budget 1977	—	$201 million

Armed Forces
There is a 24 months military service conscription for males.

Air Force
6,700 men, 78 combat planes. Three fighter squadrons with 60 F-5A/E and one with 18 F-104A interceptors. Transports include four C-130Bs, a Falcon 20, four CASA 212A Aviocars and two Doves and there are also 18 Alouette III helicopters. Training is carried out in four F-5Bs, a Hunter, two F-104Bs, ten T-37s and 12 Bulldogs. There are four S-76 helicopters on order.

Navy
160 men with ten small patrol craft.

Army
61,000 men. Two armoured, two mechanised infantry and two infantry 'divisions' (the divisional establishments must be relatively low in comparison to those of other nations to keep within the overall manpower limit); four special forces battalions and two AA brigades.

Reserves
30,000.

Para-Military Forces
Militia — 7,000; Mobile Police — 3,000.

Equipment
This is of NATO pattern and includes 320 M-47/-48/-60 tanks, 200 Centurion tanks, 140 Ferret scout cars, 600 M-113 and 120 Saracen APCs, 110 25 pdrs , 90 105 mm, 155 mm and 203 mm howitzers; 35 M-52 105 mm and 20 M-44 155 mm SP howitzers; 16 155 mm guns. Mortars are 81 mm, 107 mm and 120 mm; anti-tank weapons include 106 mm and 120 mm RCL and TOW and Dragon ATGWs. There are 200 M-42 twin 40 mm SP AA guns and a quantity of Redeye SAMs.

On order are 100 Vulcan 20 mm AA guns and some Improved HAWK SAMs. Total reserves are 30,000.

Army uniforms

Soldiers: *Summer dress:* Red and white shmarg, black agul for parades, otherwise regimental beret, brass cap badge, short sleeved khaki shirt and trousers, web belt and gaiters, black boots. *Winter dress:* As above but with long-sleeved wool shirt and khaki pullover.

Women: *Summer dress:* As for soldiers but with khaki shirt, stockings, black shoes and black shoulder bag. *Winter dress:* As for soldiers; a skirt may be worn instead of trousers.

Officers: Officers may wear the Al Sidara (a type of side hat) in service dress with the badge on the left hand side. *Summer dress:* For parades a light khaki service dress with four brass buttons, four patch pockets, black shoes, shmarg, agul and badge (or beret); working dress as for soldiers. *Winter dress:* woollen service dress as above.

Circassian Palace Guard (raised 1922): Black lambskin hat with silver crown badge, black tunic with long skirts, black breeches and boots, red undertunic. In the black leather waistbelt a silver dagger, on the chest crossed cartridge belts.

Badges of rank — Officers (as for the British Army but with the Hashemite crown and eight-pointed stars, in gold): *Field Marshal (Mushir):* The crown over crossed sabres in a wreath. *General (Fariq Awwal):* Crown over star over crossed sabre and baton. *Lieutenant General (Fariq):* Crown over sabre and baton. *Major General (Amir Liwa):* Star over sabre and baton. *Brigadier (Za-im):* Crown over three stars in pyramid. *Colonel (Aqid):* Crown over two stars. *Lieutenant Colonel (Muqaddam):* Crown over one star. *Major (Ra'is-Awwal):* Crown. *Captain (Ra'is):* Three stars. *First Lieutenant (Mulazim-Awwal):* Two stars. *Second Lieutenant (Mulazim Thani):* One star. *Officer Aspirant:* One gold bar. **Warrant Officers** (only one class): Hashemite crown worn 4 cm up from the cuff.

Regimental badges: Regiments are distinguished by the colour of their berets and by a square patch worn on the upper left arm. *Armour:* Black beret, yellow patch bearing crossed lances within a laurel wreath and under a crown in black. *Artillery:* Navy blue beret, blue patch with red cannon and yellow lightning flash. *Engineers:* Light blue beret, blue patch with two thin vertical red stripes enclosing a yellow grenade. *Signals:* Dark blue beret, dark blue over white patch. *Infantry:* Chocolate beret, red patch. *Royal Guards:* Dark green beret. *Special Forces:* Maroon beret. *Military Police:* Red beret. *Logistic services:* Khaki beret.

History of the Army

King Abdullah of Trans-Jordan was a wily and active politician who moved into his state on the heels of the retreating Turks in 1918 and claimed it for himself. A British mandate existed in the country until March 22 1946 when Trans-Jordan blossomed into the Hashemite Kingdom it is today. In 1920 the Arab Legion had been formed in Trans-Jordan and was made highly efficient by application of rigid standards of conduct and achievement. Its commander was General John Glubb (Glubb Pasha) and it recruited not only Arabs but also Circassians, Palestinians, Druses, Armenians and, most importantly, Bedouin. The Arab Legion was British trained, equipped and officered and the British Government paid a subsidy of £2.5 million annually towards its upkeep.

In May 1948 the strength of the Arab Legion was 6,000 organised as a mechanised brigade of three battalions and about 17 independent infantry companies. There was also a field artillery battery of eight 25-pounders. The armoured cars were all of British pre-1941 vintage.

It was British policy to limit supplies of ammunition to the Arab Legion and this shortage was aggravated during 1948 by the Egyptian Government impounding a shipment from the British-controlled Canal Zone intended for the Jordanians.

National history

At the beginning of the 20th century present-day Jordan was part of the Ottoman Empire and remained so until the end of World War 1 when Abdullah ibn al Hussayn raced in with Lawrence of Arabia's hordes and seized it. There was from the start fierce rivalry between Trans-Jordan (as the new state was called) and her Saudi neighbours, this going back to a bitter personal feud between the reigning houses.

King Abdullah was pro-British and his Army fought with the British Army in World War 2. He was assassinated in Jerusalem on July 20 1951 and was succeeded by King Talal who was deposed by the Jordanian Parliament on 11 August 1952 in favour of his eldest son, the present monarch HM King Hussein GCVO. King Hussein was born on November 14 1935 and received his initial military training in the Royal Military Academy Sandhurst.

Britain gave Trans-Jordan independence on March 22 1946; a new Anglo-Trans Jordanian 20-year treaty was signed on March 15 1948 but was terminated by mutual consent on March 13 1957.

The influx of Palestinian refugees has unbalanced the previously pro-royalist feeling of the country and caused much political unrest with the Palestinians forming a state within a state. This culminated in the Jordanian civil war and the crushing of the Palestinians by Hussein and his Army in September 1970 which gave birth to the Black September Palestinian terrorist movement.

From June 1967 the West Bank area of the kingdom has been under Israeli occupation. Hussein's



Kuwait Army. A Major, followed by a Captain, inspects a parade (Soldier magazine).

support rests mostly with the Bedouin tribesmen of his kingdom but this is now challenged by a rising proportion of city dwellers.

Hussein, increasingly fearful of unrest from the pro-Palestinian section of his people, dissolved the lower house of the Jordanian Parliament in 1976 and has ruled by decree ever since. As he has stated that until elections can be held throughout Jordan (including the West Bank) this situation will continue, it is likely that this event will be a long way off. There have already been many attempts on Hussein's life, it is merely a matter of time before another is made and the longer he maintains this absolute monarchy, the more likely he is to hasten the next assassin's attempt.

Kuwait

Population	—	1.1 million
Estimated GNP 1976	—	$12.6 billion
Defence budget 1976	—	$2.1 billion

Armed Forces

There is an 18-month conscription period for males and total armed forces are about 10,000.

Air Force

1,000 natives and an unspecified number of foreign experts; 49 combat planes.

One fighter bomber squadron with four A-4Ms (expanding to two squadrons); one FGA squadron with four Hunter FGA-57s and five T-67s; one interceptor squadron with ten BAC Lightning F-53s, two T-55s and 12 Mirage F-1CKs; one COIN squadron with 12 BAC-167s Strikemaster Mk 83s.

Transport command has two CD-9s, two DMC-4s, one Argosy and two Hercules.

The helicopter squadron includes six AB-204Bs, four AB-205s, two Whirlwinds, 24 Gazelles and Pumas.

Trainers are six Jet Provost T-51s and the Air Defence Force is equipped with 50 Improved HAWK SAMs.

The Air Force is to be expanded with eight Mirage F-1BK/CK interceptors, 26 A-4KUs and six TA-4KU FGAs.

Navy

500 men. Twelve inshore patrol craft, 16 patrol launches and three landing craft.

Army

8,500 men. One armoured and two infantry brigades.

Equipment

Twelve Chieftains, 50 Centurions and 50 Vickers tanks, 90 Saladin armoured cars, 20 Ferret scout cars, 130 Saracen APCs.

The artillery has ten 25 pdrs and 20 AMX 155 mm SP howitzers. Anti-tank defence is provided by SS-11s, HOT, TOW and Vigilant ATGWs.

The armoured forces are to be replaced by 153 Chieftain tanks and new APCs, artillery and SA-7 SAMs are on order.

Reserves

Not known.

Para-Military Forces

Not known.

Army uniforms

Black or khaki beret (red and white shmarg for parades), khaki shirt and trousers, black boots or desert boots, olive web equipment. British steel helmets and rank badges. Chaplis (sandals) are worn in barracks.

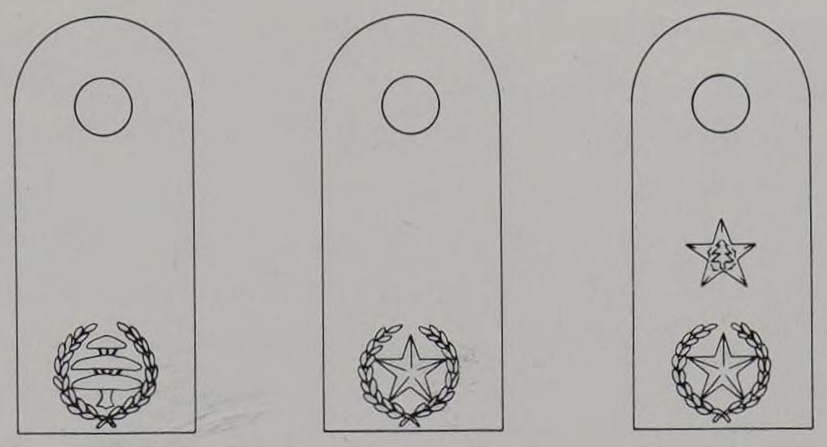
History of the Army

The Army was formed after World War 2 with British help. It has seen no action of any real significance.

National history

Being a small backwater of no importance nothing much ever happened in Kuwait to bring it into the history books. However, when oil was discovered

there in very large quantities, the country suddenly became of great international importance and the object of much interest from outside, not all of it friendly. In 1961, after Britain had granted independence to Kuwait, Brigadier Abd el Karim Qasim, who had seized power in Iraq, made an attempt to take over the neighbouring state. The attackers were beaten off with the help of British forces and the Arab League. Kuwait returned to being a quiet, though rich, backwater which has played little part in the troubles which beset the rest of the Middle East. Relations with Iraq have remained more than a trifle strained.



Lebanese Army rank badges

Lebanon

Population	—	2.98 million
Estimated GNP 1974	—	$3.7 billion
Defence budget 1977	—	$69.9 million

Armed Forces

Air Force

1,000 men, 21 combat planes. One fighter ground attack squadron with ten Hunter F70s and two T-66s. One interceptor squadron with nine Mirage III EL/BLs equipped with R.530 AAMs.

One helicopter squadron with ten Alouette II/IIIs and six AB-212s.

Navy

250 men. Six patrol craft and one landing craft.

Army

Due to the effects of the recent civil war, the Lebanese Army has ceased to exist as such. It formerly consisted of 17,000 men with 20 battalions of infantry, tanks and artillery. Equipment then in its possession included: 25 AMX-13, 18 M-41 light tanks, 100 Panhard APCs and Chiamite armoured cars, 80 M-113, 16 M-59 and some Panhard M-3 APCs; six 75 mm guns, 24 122 mm, 20 155 mm howitzers, 25 120 mm mortars, some 106 mm RCLs, 60 Charioteer 84 mm SP AT guns, ENTACs, SS-11s and 20 TOW ATGWs; 60 20 mm and 30 mm and 15 M-42 40 mm SP AA guns.

Reserves

Not known.

Para-Military Forces

Gendarmerie — 5,000.

Army uniforms

Regimental collar patches: *Armour:* Light grey. *Artillery:* Red. *Engineers:* Black. *Signals and logistic services:* Black. *Infantry:* Dark blue. *Medical:* Maroon. *Transport:* Dark green.

Badges of rank — Officers (worn on the shoulder in gold): *Brigadier:* Crossed sabre and baton over a five-pointed star within a wreath. *Colonel:* Three five-pointed stars (each having in its centre the cedar emblem) over a star within a wreath. *Lieutenant Colonel:* As for Colonel but only three stars in all. *Major:* As for Colonel but only two stars in all. *Senior Captain:* A plain, five-pointed star within a wreath. *Junior Captain:* Three plain five-pointed stars. *First Lieutenant:* Two such stars. *Second Lieutenant:* One such star.

Warrant Officers: *Senior:* In gold a cedar tree within a wreath. *Junior:* The same in silver.

Soldiers (white chevrons, point down, worn on the upper sleeve): *Staff sergeant:* A five-pointed star over three chevrons. *Sergeant:* Three chevrons. *Corporal:* Two chevrons. *Lance-Corporal:* One chevron.

History of the Army

The French recruited a local militia in the country in the late 19th century and it was policy to recruit Christians in preference to Moslems in the belief that they were the better fighters. Druses, Armenians and Alonites were also taken into service. In May 1948 the Lebanese Army consisted of five infantry battalions, five artillery batteries and small detachments of cavalry, armoured cars and tanks.

National history

In 1920 France, which held the League of Nations' mandate for the Lebanon area, established the State of Lebanon in its present frontiers. In 1926 it became a republic and achieved independence from France in December 1943. It is an Arab republic but the majority of the population are Christians. Inter-

sectarian differences remained submerged during the affluent period up until 1975 while Lebanon was the rich banking and commercial centre of the Middle East.

The pressures exerted by 182,000 Palestinian refugees and the uneasy situation surrounding Israel, however, caused unrest and in May 1958 pro-Nasserite elements rose against President Chamoun who eventually had to call in American assistance to help him restore control of the Moslem quarters of Beirut, Tripoli, Sidon and northern Bekaa. A large US task force was landed on July 15 1958.

In March 1975 a vicious, sectarian civil war, which still flares up occasionally, broke out in the country and destroyed Lebanon's peaceful and prosperous commercial assets and cost thousands of lives. Cease-fire agreements came and went with alarming speed until eventually Syria sent in its Army to part the combatants — Christian on one side, Moslem (and Palestinian) on the other.

Later, the Lebanese Christians, who originally greeted the Syrians as allies, came to regard them as enemies and looked to the Israelis to give them assistance.

The Libyan Arab Republic

Population	—	2.63 million
Estimated GNP 1975	—	$12.2 billion
Defence budget 1976	—	$229 million

Armed Forces

Voluntary military service; as head of state Colonel Gaddafi regards himself as a 'Soldier for Islam', the forces enjoy great power and prestige within the country.

Air Force

4,500 men (including foreign instructors), 162 combat planes. One bomber squadron with 12 *Blinders*; four interceptor squadrons with 30 Mirage IIIEs and 30 *Flogger* Es; four FGA squadrons with 50 Mirage Vs; two COIN squadrons with 30 Galebs; one reconnaissance squadron with ten Mirage IIIERs and two transport squadrons with eight C-130Es, nine C-47s, two Falcons and one Jetstar. Thirty-eight Mirage F1s are on order.

Training planes include ten Mirage IIIBs, two Mystère 20s, five *Floggers,* 12 Magisters and three T-33s.

There are four squadrons of helicopters with 13 Alouette II/IIIs, three AB-47s, nine Super Frelons, eight CH-47Cs and 12 *Hips*. Sixteen CH-47Cs are on order.

Air defence consists of three SAM regiments with 60 Crotale launchers and eight batteries armed with 60 SA-2, SA-3 and SA-6 SAM launchers.

Navy

2,700 men. A frigate with Seacat SAMs, two corvettes (three more under construction), three FPBs with SS-12Ms, 11 patrol craft and one logistic support ship. On order are ten FPBs, 80 Otomat SSMs and one LST.

Army

22,000 men. One armoured, two mechanised infantry, one National Guard and one special forces brigades; three field and two AA artillery battalions.

Equipment

Libyan Army equipment is a mix of the arsenals of East and West, reflecting the changing role of the country in the recent past where it has moved decidedly to the left. Two hundred T-62s, 1,000 T-54/-55 tanks, 100 Saladins and 75 Cascavel EE-9 armoured cars, 100 Ferret scout cars, 220 BTR-40/-50/-60s, 110 OT-62/-64s, 60 Saracens, 250 M-113A1 and BMP APCs. Artillery includes 75 105 mm, 70 122 mm and 155 mm howitzers. ATGWs are estimated at 300 Vigilants and Saggers and SSMs are represented by the Soviet Scud. AA artillery includes 120 guns (L40/70 Bofors, 23 mm and 57 mm).

Army helicopters are six AB-47s, five AB-206s, four Alouette IIIs; there are also some Cessna 0-1 light planes.

On order are 400 Cascavel/Urutu AFVs.

Reserves

Not known.

Para-Military Forces

Not known.

Army uniforms

Khaki shirt and trousers, khaki belt, black shoes or boots, blue, red, black or khaki beret according to arm. Officers' have khaki service dress jackets with four-button front and four patch pockets with buttoned flaps. Combat dress includes US style helmet and webbing. The cap badge is the brass UAR eagle with the tricolour shield on its breast (black, white, green).

Badges of rank: Until 1969 these were British pattern (but with the Libyan crown replacing the British) but after the coup the eagle replaced the crown. Immediately following the coup Gaddafi appeared in public wearing his rank crowns upside down until new badges could be procured.





Left *Prior to Gaddafi's rise to power in Libya British technicians gave training assistance to the Libyan Army* (Soldier magazine). **Right** *Libyan gunners being instructed by an officer of the Royal Artillery* (Army Public Relations).

History of the Army

The first Army units were raised following liberation from the Italians in 1945. Initially the British Army helped train and equip these forces but, with the expulsion of the British and Americans, Communist influences moved in.

National history

Prior to the discovery of oil in the 1950s, Libya was a poor country and had been an Italian colony from 1911 to 1951. She is now a very wealthy state. Until 1969 Libya was a monarchy and was not involved in the Six Day War (1967), but in that year King Idris I was deposed by a group of Army officers and Colonel Moamer al Gaddafi — then 27 years old — assumed power at the head of a revolutionary council of 11 officers. One of the first acts of the new government was to eject the British forces from their two small bases at El Adem and Tobruk and the Americans from their military airfield at Wheelus Field. Contracts placed with Britain for the supply of Thunderbird and Rapier defence systems were cancelled.

Libyanisation of all commercial concerns (except banking and oil companies) was forced ahead at great speed and the ancient criminal punishments specified in the *Koran* were introduced. These included amputation of a hand for theft.

Libya, which as a monarchy had been at odds with Egypt, now moved into her camp and thus into the Soviet web. Since becoming a republic, Libya has become so radical that even her one-time ally Egypt has become alarmed. In 1975 Colonel Gaddafi was accused of planning to annex large tracts of the Egyptian Western Desert and of trying to cause civil unrest in that country. On August 4 1975 Egyptian and Libyan armour glared at each other across the border and on August 26 some minor skirmishes actually took place.

Libyan assassins were arrested in Italy and Egypt in March 1976 as they hunted prominent Egyptian targets, and other Libyan killers in that country — en route to cause mayhem in Iraq — were also detained.

At that time about 25 per cent of Egypt's work force was employed in Libya and expulsion of these people proceeded apace as relations between the countries worsened. A similar policy was applied to Tunisian workers.

There is considerable opposition within Libya to Gaddafi's dictatorship, student demonstrations in January were crushed with loss of life and the original 11-man revolutionary council is now reduced to four members with some of those missing having disappeared without trace; others escaping — Major Mokhtar al Girwi to the USA and Major el Huni to Egypt. This, coupled with the policy of supporting subversive and revolutionary movements all over the world (the IRA, Black September, the Red Army in Japan, Black Power, President Amin, and the Red Army Faction in the Federal German Republic) have led to an increasing isolation for Libya in world relations. Gaddafi's fanaticism marks him for the assassin's blade — it can only be a matter of time before an attempt succeeds.

The Kingdom of Morocco

Population	—	18.2 million
Estimated GNP 1976	—	$7.85 billion
Defence budget 1977	—	$345.9 million

Armed Forces

84,600 men. There is selective conscription; each year 15,000 of the available 200,000 with military service liability are called up for 18 months. The forces are used as a national development service, building roads, bridges, schools and hospitals and giving educational and medical assistance. Servicemen and their families receive free medical treatment.

Air Force

5,650 men with 45 combat planes. Two FGA squadrons with 24 Magisters; two interceptor squadrons with 17 F-5As and four F-5Bs.

Transport: two squadrons with eight C-47s, eight C-119Gs, eight C-130Hs, six King Airs, 12 Broussards and one Dornier DO-28D.

Helicopters: 40 AB-205As, eight AB-206s, five AB-212s, four Alouette IIs, six Gazelles and 20 Pumas.

Trainers: 25 T-6s, 18 T-28s, two SF-260Ms.

On order are 50 Mirage F-1 fighters, 12 T-34Cs, 20 T-2Es and 28 SF-260M trainers and 20 Puma helicopters.

Navy

4,000 men (including 600 marines). Three corvettes, one minesweeper, nine patrol craft, one LSL, one landing craft. On order are 14 patrol craft, two LSLs, five frigates and one corvette.

Army

75,000 men. Four armoured, one mechanised, three lorried infantry and one mountain brigades (including five tank battalions, two motorised infantry battalions, nine Royal Guard, 18 infantry, seven Camel Corps and two desert cavalry battalions).

There are also one parachute, four 105 mm and one 155 mm towed field artillery, one AMX 105 mm SP field artillery and one AA artillery brigades.

Reserves

Not known.

Para-Military Forces

People's Militia — 30,000; Gendarmerie — 8,000.

Equipment

NATO (Italian and French) small arms; 50 M-48s, 50 T-54 MBTs; 120 AMX-13 light tanks, 36 EBRs, 50 AML and M-8 armoured cars; 40 M-3 half-tracks, 95 OT-62/-64s, 30 UR-416 APCs. Artillery — 30 AMX 105 mm SP guns, 150 76 mm, 85 mm and 105 mm towed field guns; 18 M-114 155 mm SP howitzers; 82 mm and 120 mm mortars; 105 mm RCL, ENTAC and TOW ATGWs. AA guns — 50 37 mm, 57 mm and 100 mm pieces; Chaparral SAMs. Logistic vehicles — Landrover, Bedford and UNIMOG trucks. Some Alouette III helicopters.

Army uniforms

Officers: *Full dress uniform:* White, high-necked jacket, gold buttons, gold fringed, dark green epaulettes, regimental collar badges, black trousers. *Service Dress:* Light grey cap, jacket and trousers, gold buttons, rank badges and regimental collar badges.

Combat dress: Olive drab, US-style helmets and webbing equipment.

In service dress collar badges are worn to indicate arm of service. Examples are: *Infantry:* Crossed rifles (brass). *Armour:* A tank (side view, brass). *Cavalry:* Crossed sabres under a crown (all superimposed on a gate in brass). *Logistic services:* The Moroccan star under a crown within a wreath (brass). *Artillery:* Crossed cannons (brass).

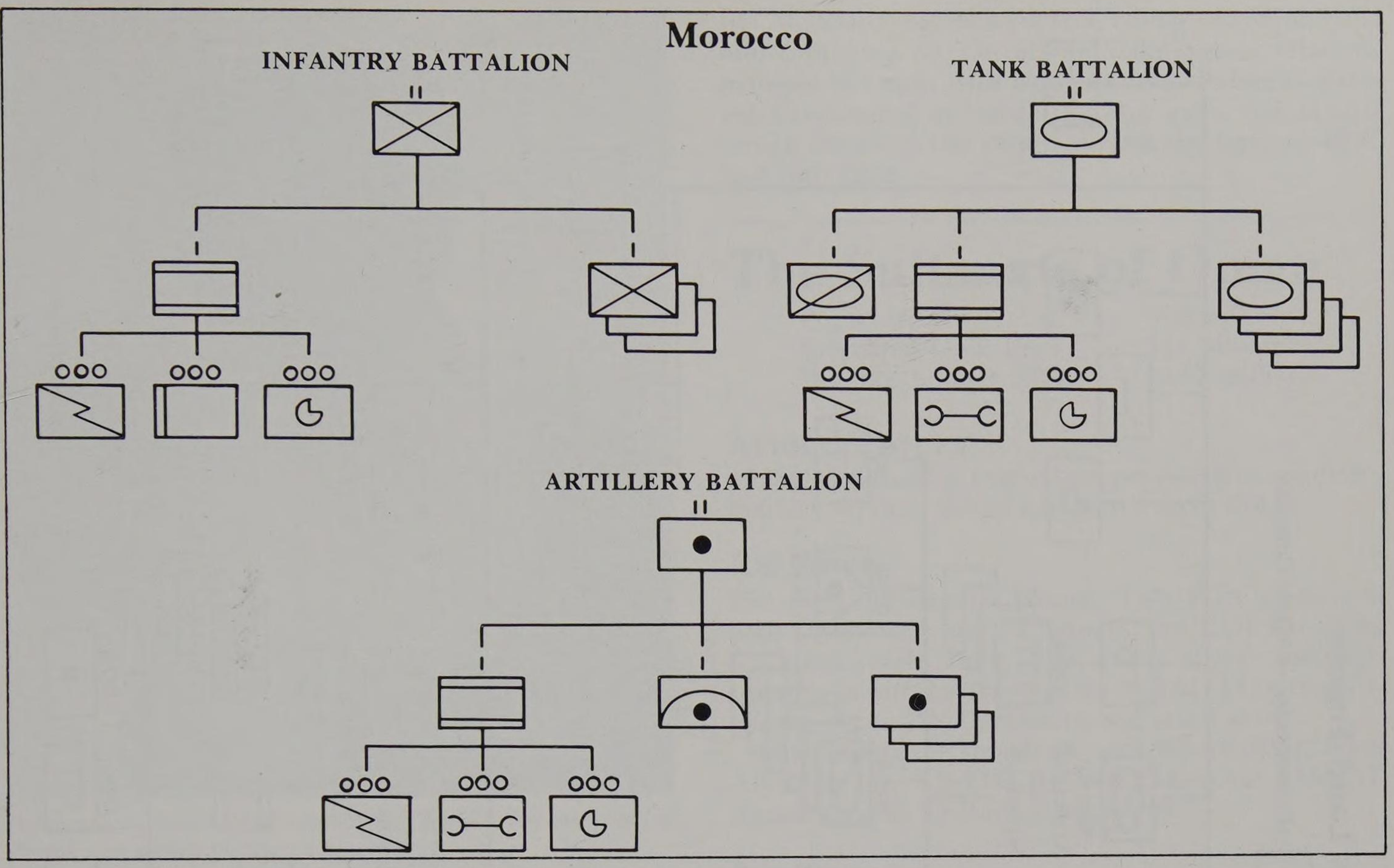
History of the Army

Until 1956 Moroccans served in the French colonial forces and the Army was composed of professionals; it fought in the Italian campaign in 1943 and took part in the occupation of Germany. Moroccan troops were also employed in the Indo-China war. After independence in 1956 French officers were gradually replaced by Moroccans (except for a few specialists). Training and tactical doctrine follows the French pattern still. In 1960 1,900 Moroccan soldiers served in the Congo as part of the UN Forces and in 1963 the Army performed well in the border conflict with Algeria. In 1971 and 1972 certain factions within the Army were involved in two attempted anti-royalist rebellions with the aim of setting up a republic but both revolts were put down.

National history

During the 19th century Britain and France vied for influence in Morocco's affairs and Spain fought small wars to bite off pieces of Moroccan territory (capture of Tetuan, the enlargement of Cueta, 1860 and the cession of Ifni, 1860). In 1904 Britain agreed to give France a free hand in Morocco in return for undisputed control of Egypt, and Spain was pacified by France agreeing to recognise northern Morocco as a sphere of Spanish interest. By the Treaty of Fez (March 30 1912) Morocco became a French protectorate.

The population is split into two main groups — the ruling Arabs and the nomadic Berbers with a certain



amount of friction between the two which the French exploited. During World War 2 many Moroccans (mainly Berbers) served with distinction in the French Army in France and the reigning sultan (Sidi Mohammed V, who came to the throne in 1927) refused to implement the anti-Jewish measures insisted upon by the Vichy French when they moved in.

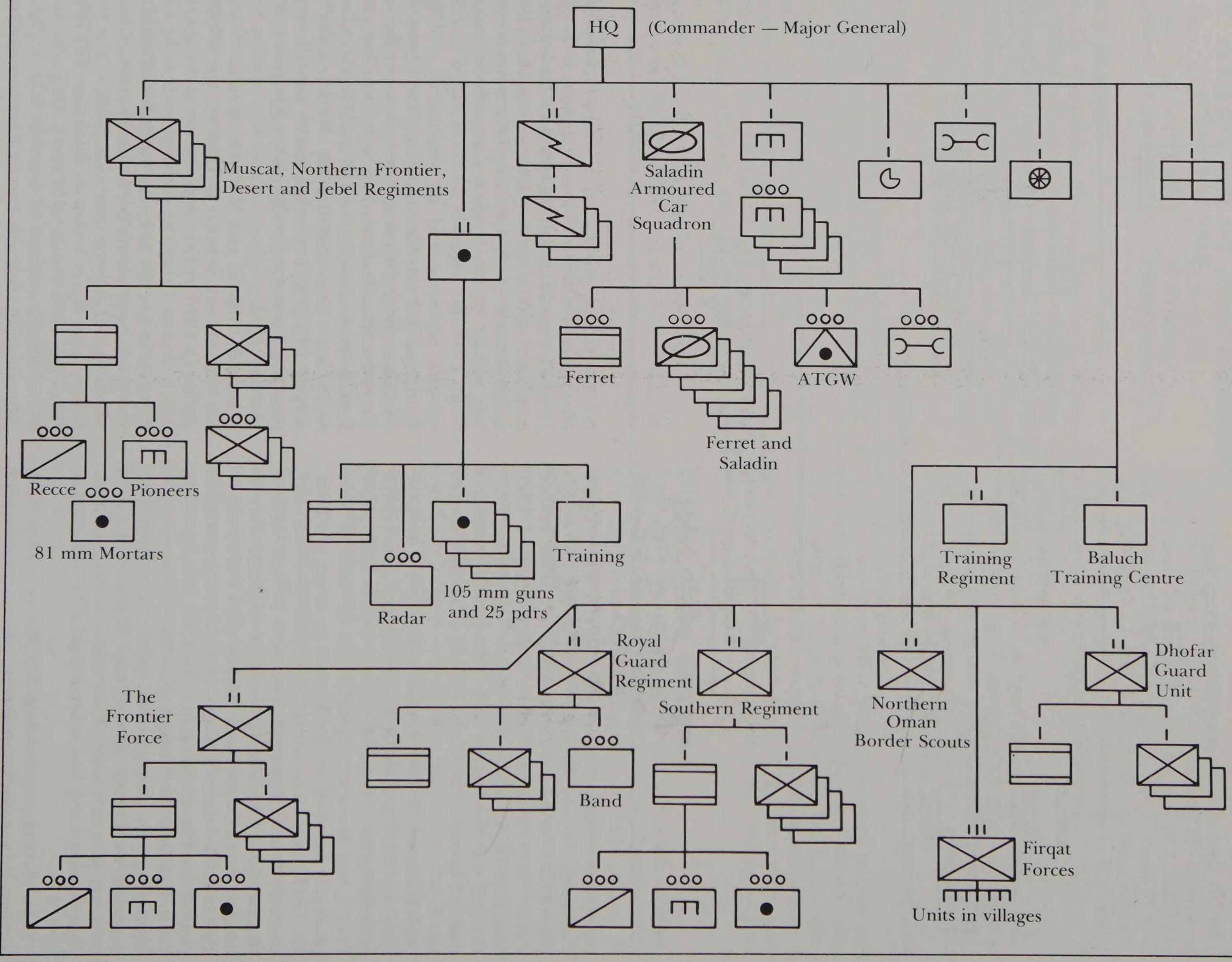
Mohammed V met President Roosevelt in Casablanca in 1943 and became infected with anti-French sentiment. An independence movement (the Istiqlal Party) was founded in 1943 but its leaders were promptly arrested by the French as being pro-Nazi. In 1947 the sultan toured his land and was rapturously received; he later refused to sign decrees prepared for him which would have placed French citizens in municipal elected bodies. On December 12 1950 the Moroccan Council of Government walked out on the French governor, General Juin, and this led to Mohammed V being accused of supporting the Istiqlal against France. His palace was then surrounded by French troops and Berber tribesmen bringing him only marginally under French control. Juin was replaced by General Guillaume on August 28 1951.

The French now instigated Berber efforts to depose Mohammed and forced him to give some of his traditional powers to a council composed of Moroccan ministers and French directors. On August 18 1953 the sultan was deported to Madagascar for continued refusal to co-operate — he at once became a national hero and Moroccan nationalists found willing refuge in the Spanish Zone of their country. From 1954 the Algerian situation added to France's colonial problems and on August 20 1955 some French settlers were massacred at Oued Zem, while a Liberation Army began operations against the French from the Spanish Zone. The game was lost and the French recalled Mohammed V to Morocco where independence was granted on March 2 1956; in August 1957 Mohammed declared himself king. He died and was succeeded by his son King Hassan II on March 3 1961.

In 1964 Algeria and Morocco came to blows over the vast iron ore deposits at Tindouf; the dispute was settled in 1970 by the Organisation of African Unity which declared that the deposits were to be shared. Phosphates are the mainstay of the national economy and there has recently been a confrontation between Morocco and Algeria over ownership of the Spanish Sahara since Spain withdrew from that area in 1976.

During 1975 Spain indicated willingness to withdraw from her colony of Spanish Sahara and a dispute about their future immediately arose between

Sultan of Oman's Land Forces





A Lieutenant, Sultan of Muscat's Armed Forces. Note the spread of British war medals (Soldier magazine).

Morocco and Mauritania (who both claimed sovereignty) and Algeria who supported an independent state. A nationalist armed movement — the Polisario — further complicated the picture and received much Algerian aid.

King Hassan then launched over 350,000 of his subjects on the famous Green March into the disputed territory in November 1975. Algeria and Libya formed a mutual defence pact and Algerian support for the Polisario guerrilla activities increased. After a flurry of diplomatic activity in the UN, King Hassan recalled his marchers from the Spanish Sahara on November 9 1975 and in subsequent negotiations Spain handed over the territory to Morocco and Mauritania on March 1 1976 although Moroccan troops occupied the territory on December 11 1975.

Cuban and North Vietnamese leaders visited Algeria and soon 'volunteers' from these states were fighting alongside Polisario guerrillas from Algerian bases against Moroccan troops. On February 27 1976, Polisario declared formation of a Saharan Arab Democratic Republic in the old Spanish Sahara with a government in exile in Algeria.

Algerian and Moroccan forces clashed on January 27-29 1976 at the Angala oasis and the Moroccans claimed 100 prisoners and 200 enemy dead. In a reprisal attack on the oasis on February 15 that year the Algerians regained control, killing 148 Moroccans and capturing 36. On March 7 diplomatic relations between the countries were severed. Polisario guerrillas continued to harass the Moroccan and Mauritanian forces in the disputed land throughout 1977 and into 1978.

The Sultanate of Oman

Population	—	806,000
Estimated GNP 1977	—	$14 billion
Defence budget 1977	—	$457 million

Armed Forces

13,000 (excluding expatriate personnel); voluntary military service. Sultan's Armed Forces (SAF).

Air Force

750 men, 36 combat planes. Two FGA squadrons with 16 Hunters and 12 Jaguars; one COIN/training squadron with eight BAC-167s; three transport squadrons with 15 Skyvans, three BAC-111s, two Viscounts, seven BN Defenders and one Falcon.

One helicopter squadron with 20 AB-205s, three AB-206s, one AB-212, five AB-214s. One SAM AD squadron with 28 Rapier launchers.

Navy

450 men. Three patrol vessels (one royal yacht, two ex-Dutch minesweepers), one training ship, four FPBs, four small landing craft. On order are two minesweepers, three FPBs and one logistic support ship.

Army

11,800 men. Eight infantry battalions, one Royal Guard battalion; one armoured car squadron, one parachute company, one artillery regiment, a signals and an engineer battalion.

Reserves

Not known.

Para-Military Forces

Militia (Firqat) — 3,000; Sultan's Special Force — 100 men in an SAS-type unit.

Equipment

NATO small arms; 36 Saladin armoured cars, 24 old 75 mm Pack howitzers and 25 pdrs, 36 new 105 mm Light Guns, three 5.5-inch guns, 120 mm mortars, ten TOW ATGWs. Landrover and Bedford soft-skinned vehicles.

Army uniforms

Olive drab combat dress with dark green and black



Background photograph *Gunners of 7 Battery Royal Horse Artillery assemble 105 mm Pack howitzers prior to going into action in Trucial Oman* (Soldier magazine).

Inset left *A Gazelle helicopter firing a HOT ATGW during trials. The relatively new concept AT helicopters may well prove very important in future conflicts* (Christopher F. Foss).

Inset below left *Rank badges — Colonel, Sultan of Oman's Forces.*

Inset right *Sultan of Oman's Armed Forces — an armoured squadron mounting Ferret scout cars* (Soldier magazine).



shmarg and brown plimsolls. British Army style 1958 pattern webbing. Barrack dress is khaki shirt and trousers with metal shoulder titles on a backing cloth the colour of which is repeated in the stable belt, beret and (for officers and NCOs) the lanyard. The colours are: *Desert Regiment:* Yellow. *Muscat Regiment:* Red. *Northern Frontier Regiment:* Dark green. *Jebel Regiment:* Grey. *Gendarmerie:* Navy blue (they also wear black chaplis and grey shirts). *HQ and Services:* Khaki. Desert boots are worn.

A green and yellow shmarg was worn up until 1970 when it became red and white for all regiments (the Gendarmerie wear dark blue and white); the shmarg is worn for parades and dress occasions.

History of the Army

Prior to the Jebel Akhdar war of secession in 1957-1959 Oman had no Army. British troops were seconded to help the sultan suppress the inland rebels and following his victory, the ruler founded an Army trained, organised and equipped on British lines. In 1970 the present ruler (Sultan Qaboos bin Said) deposed his despotic father, Sultan Said bin Taimur, and began to open up the country to modern influences. Progress has now gone so far that even a Women's Service Corps, performing clerical, culinary and signalling duties has been formed.

Until 1970, when Sultan Qaboos seized power, almost all officers and men in the SAF were Pakistani Baluchis; they now make up about half the strength, the remainder being native Omanis. About 450 British officers and NCOs are either seconded or on contract to the SAF and a British Army Training Team there includes elements of 22 SAS. A squadron (company) of Royal Engineers and a Field Surgical Team RAMC are also on loan to assist in the civil improvement scheme in Dhofar. Other military assistance is provided by Jordan (an engineer squadron) and Iran (the Imperial Iranian Task Force which is an infantry brigade equivalent).

National history

Britain's relations with Oman began during the Napoleonic wars when, in 1798, a treaty of friendship was concluded between the two countries thus securing British use of the harbour facilities at Muscat. This excluded the French Navy from the area and, to secure the seaways for their merchantmen, the British proceeded to wage a lengthy series of campaigns against the pirates of that coast who previously had provided the main source of employment and income for the population of the region.

The Sultan of Oman's influence was secure really only in the coastal strip; the interior of the country was an area for which the Saudi Arabian Wahabis vied with him for control.

Until July 24 1970 Oman's population had been kept in a state of isolation from the outside world with life being regulated entirely in accordance with centuries old rulings of the *Koran.* The present ruler, Sultan Qaboos bin Said, recognised the dangers of continued repression and on that date deposed his ultra-conservative father. He was not a moment too soon for already discontented Omanis were active fomenting revolt to bring about the changes they so badly wanted.

The British gave the new sultan wholehearted support in his reforms but the rebels, with Communist assistance from Saudi Arabia (and later South Yemen) were already active, trying to profit from the unrest associated with such drastic changes of power.

It was only after the campaigns in the Jebel Akhdar and in Dhofar that Sultan Qaboos' authority has been extended throughout the state. His political, social, economic and military reforms have been extensive and popular (except with the ultra-conservatives) and support for the Communist agitators has proved to be extremely slight. The killing of four British technicians in Dhofar in July 1978 was claimed to be the reopening of the rebellion in that province but there has been little subsequently to support this.

Omani sovereignty over Dhofar began in 1829 but, in 1878, Said Bin Sultan claimed it for the Ottoman empire. Eighteen months of his harsh rule was enough to cause the natives, with Saudi Arabian assistance, to drive him out. With British aid the Omani sultans regained control of the province. With a brief exception in the 1890s Dhofar has been an Omani possession ever since. The recent rebellion began in 1963.

Qatar

Population	—	200,000
Estimated GNP 1975	—	$425 million
Defence budget 1977	—	Not known

Armed Forces

4,200 men; all part of the 'Army'. Voluntary military service.

Air Force

300 men. Four Hunter FGAs; one Islander transport; two Whirlwinds, four Commandos and two Gazelle helicopters. Tigercat SAMs. On order are three Lynx helicopters.

Navy

400 men. Eleven patrol craft (five coastal).

Army
3,500 men. Two armoured car battalions, one Guards' infantry battalion, one 'mobile' regiment.

Reserves
Not known.

Para-Military Forces
Not known.

Equipment
NATO small arms. Thirty Saladin armoured cars, ten Ferret scout cars, eight Saracen APCs. Artillery — four 25 pdr guns; some 81 mm mortars.

Army uniforms
Black or khaki berets (red and white shmarg for parades), khaki shirt and trousers, black boots or desert boots, olive web equipment, British steel helmets.

History of the Army
Until the end of the British presence in the Persian Gulf Qatar had no forces to speak of; she now contributes her contingent to the federated force.

National history
From the 18th century Qatar was under nominal control of the sheikhs of Bahrain but in 1868 the British, anxious to clear out the many pirate nests along that coast, moved in, set Mohammed ibn Thani al Thani on the throne and took over external affairs. In 1893 an armed Turkish invasion of the state was successfully resisted by Qatari forces. In 1916 Qatar became a British protectorate; oil was discovered in 1940 and in 1971 the country became independent, refusing to join the United Arab Emirates as originally had been envisaged.

The current ruler is Sheikh Khalifa bin Hamad al Thani who assumed the throne on February 22 1972.

The Kingdom of Saudi Arabia

Population	—	7.5 million
Estimated GNP 1975	—	$37.2 billion
Defence budget 1977	—	$7.53. This high figure of almost 20 per cent of the GNP includes military aid to Jordan

Armed Forces
Military service is voluntary.

Air Force
15,000 men with 137 combat planes. Two fighter-bomber squadrons with 70 F-5Es; two interceptor squadrons with 37 Lightning F-52/F-53s; two COIN squadrons with 30 BAC-167s; two helicopter squadrons with 16 AB-206s, 24 AB-205s, 12 Alouette IIIs and one AB-204.

Transport planes include two squadrons with 39 C-130E/Hs, four KC-130 air-tankers, one Boeing 707, two Falcon 20s, two Jetstars.

Training planes are 20 F-5Bs, seven Lightning T-54/-55s and six Cessna T-41 As.

On order are 20 F-5Fs, 11 BAC-167 planes, Maverick ASMs and Sidewinder AAMs.

Navy
1,500 men. Four FPBs (three 'Jaguar' Class) and one patrol craft. On order are six FPBs with GM, four minesweepers, four landing craft and Harpoon SSMs.

Army
45,000 men. One mechanised division, an armoured brigade, two infantry, one paratroop and one Royal Guards battalion; three field artillery and six AA artillery battalions, ten SAM batteries with HAWK SAMs. 700 soldiers are currently in Lebanon with the Arab Peace-keeping force.

Reserves
Not known.

Para-Military Forces
National Guards — 20,000; Frontier Force and Coastguards — 6,500 with 50 small patrol boats and eight SRN-6 hovercraft.

Equipment
NATO small arms; 400 AMX-30s, 75 M-47/-60 MBTs; 60 M-41 and 150 AMX-13 and Scorpion light tanks; 200 AML-60/-90s and some old Staghound and Greyhound armoured cars; Ferret scout cars. M113, Panhard M-3 and Commando APCs. Artillery has 105 mm field guns; AT artillery is 75 mm RCL, and there are SS-11, Dragon, Harpoon and Vigilant ATGWs. AA defence is Rapier and HAWK SAMs.

On order are 200 M-60 MBTs, 100 Scorpions, 250 AMX-10P MICVs, 250 APCs, more artillery (105 mm Light gun), AMX-30SA SP AA guns, Crotale SP SAMs (called Shahine) and six batteries of Improved HAWKS.

Army uniforms

Soldiers: *Summer dress:* Khaki shirt and trousers, blue or khaki beret with crowned brass palm tree and crossed sabres badge within a circle; web belt and gaiters, black boots. *Winter dress:* Khaki battledress.

Officers: As for soldiers but also (for parades and walking out) light khaki service dress with brass buttons bearing the palm tree and crossed sabres, four to the tunic front, two patch breast pockets with buttoned flaps, two inset side pockets with rectangular flaps but no buttons, light khaki shirt and tie. Regimental collar badges (as for Egyptian Army). For parades the shmarg and agul.

The Royal Bodyguard has its special cap badge in brass: an ornate, crowned shield with on its centre the crescent and star under a crown and surrounded by nine five-pointed stars.

Regimental badges (brass, worn on the collar): *Royal Guard:* Within a crowned laurel wreath, over a scroll, crossed sabres under the inscription Alharas Almaliki (Royal Guard). *Armour:* Within a crowned laurel wreath, over a scroll, the hull of a tank, rising from it a rearing winged horse before two lances with a scroll stretched between them bearing Alforsan (Horses). The lower scroll bears Alnasr ua Almaut (Victory or Death). *Artillery:* A flaming grenade as worn by British artillery and engineers; the scroll carries the motto Almadfahijat (Artillery). *Engineers:* Under a crown three waggon wheels splashing through water over a label bearing Almohandasun (Engineers). *Signals:* Within a crowned wreath a signal tower emitting flashes, standing on the upper half of the world, behind crossed signal flags; at the base a round, winged disc bearing Alisharat (Signals). *Infantry:* Within a crowned wreath, over a scroll, a charging infantryman; on the scroll the motto Almashah (Infantry). *Medical:* Within a crowned wreath a serpent around a staff; below it a scroll bearing Altibijat Alchidmat (Medicinal Service). *General Service:* A 'clover leaf' within a wreath under a crown in an eight-pointed star over a scroll bearing Chidmat Alshaish (Army Service). *Technical Corps:* Within a crowned wreath a cog wheel enclosing tanks and guns over a square label bearing Alahijanat, beneath the wreath a scroll bearing Alsejanat. *Quartermaster Corps:* A round, crowned shield on a trophy of arms, behind crossed sabres over a scroll bearing Almohimat. *Paratroopers' Wings:* A winged parachute and a circular badge enclosing a parachute. The upper peripheral inscription reads: Almamlakat Alaharabijat Alsahodijat (Kingdom of Saudi Arabia), the lower reads Salam Almodalun Almalaki (Royal Paratroop Corps).

Cap badge (brass): Within a crowned ring a palm tree over crossed sabres, all over a scroll.

Badges of rank — Officers (gold, worn on the shoulder): *General:* A gold and green crown over a five-pointed star over crossed sabre and baton. *Lieutenant General:* A crown over crossed sabre and baton. *Major General:* A star over crossed sabre and baton. *Brigadier:* A crown over three stars in line. *Colonel:* A crown over two stars. *Lieutenant Colonel:* A crown over a star. *Major:* A crown. *Captain:* Three stars in line. *First Lieutenant:* Two stars. *Second Lieutenant:* One star.

Soldiers (white chevrons, point up on the upper sleeve): *First Sergeant:* Four chevrons. *Platoon Sergeant:* Three chevrons. *Corporal:* Two chevrons. *Lance-Corporal:* One chevron.

History of the Army

In 1937 King Ibn Saud, prompted by envy of King Abdullah of Jordan's British-trained Arab Legion, resolved to set up a modern Army to replace his 40,000 strong, feudal-style desert warrior mob. His plans were delayed by World War 2 but by 1947 he had set up a defence ministry and invited a British Military Mission to Jedda to organise and train a mechanised force of about 10,000 strong. Arab prejudice, and the fact that much of the country was classed as a forbidden area to this military mission, severely hampered its work. Rampant nepotism, which influenced the selection of officer candidates, and the fact that no foreigners could hold commissions in the Saudi Arabian Army, also limited progress in the infant Army.

By January 1 1949 two battalions of Saudi troops had moved into the front line against the Israelis and even this must be classed as an achievement.

National history

From the 16th century until the end of World War 2 the Arabian peninsula was more or less under Ottoman control although rule was more often by bribery than by enforcement.

In June 1916 Sheikh Sharif Husayn of Mecca came out in support of the British and one of his sons, Feisal, later became King of Syria from 1918-1920 and then King of Iraq, while another son — Abd Allah — seized Trans-Jordan for himself and later became king there.

Sharif Husayn's old enemy in Arabia was Ibn Saud of the Wahhabi sect who also received money and aid from the British in the Great War. In 1919 the feud flared into open conflict and the Wahhabis won; British pressure stayed Ibn Saud's sword for some time but in 1924 the Wahhabis marched into the Hejaz and ejected Sharif Husayn from his throne. This feud has generated much of the strife between Saudi Arabia and Jordan to this day.

Ibn Saud had kept his land free of contamination from modern society and technology and he control-

led very closely every tiny step that Saudi Arabia took towards the 20th century.

In the 1930s oil was discovered in Arabia and the US-owned Arabian Standard Oil Company (later ARAMCO) gained exploitation rights in Saudi Arabia; this sudden and vast influx of wealth has transformed the country in many respects and has caused many social problems. Nasser's Egypt — envious of the oil revenues of her neighbours and their colonialist partners — mounted a propaganda campaign in the late 1950s designed to discredit the feudal rulers of the oil states and their western backers in the hope of gaining control of the assets in the vacuum left after the overthrow of the old regimes.

In 1962 Egypt gained a foothold in the Yemen and Saudi Arabia backed the Yemeni royalists in their fight against the Egyptian-supported republicans. In 1970 the Saudis mediated in the resulting negotiated settlement in the Yemen.

King Ibn Saud died in 1953 and was succeeded by his son, Saud, an ineffective monarch who was deposed in 1964 by a brother, Feisal. In 1965 Feisal obliged Nasser to withdraw his Egyptian troops from northern Yemen at the Jidda Agreement. Feisal was assassinated on March 25 1975 and was succeeded by King Khaled ibn Abdul-Aziz

Constitution: The King is his own Prime Minister and rules through a Cabinet system; the religious law of Islam is the law of the land administered by religious courts.

The Somali Democratic Republic

Population	—	3.3 million
Estimated GNP	—	$300 million
Defence budget	—	$25 million

Armed Forces

Voluntary military service. The break with the USSR means that spares and repair facilities for many items are in short supply so it may be assumed that not all equipment shown is in serviceable condition. The recent defeat in the Ogaden will also have caused losses.

Air Force

1,000 men with 55 combat planes. One bomber squadron with three *Beagles*; two FGA squadrons with 40 *Frescoes* and *Midgets*; one fighter squadron with 12 *Fishbeds*.

One transport squadron with three *Cokes* or *Curls*; one helicopter squadron with five *Hounds*, five *Hips* and one AB-204.



Somali Army (present day) brass cap badge

Somaliland Scouts (British administration) silver cap badge

Somali Army cap badges

Other planes include one C-45, three C-47s, six P-148s, 15 *Moose* and two Dornier DO-28s.

Navy

500 men. Three Osa Class FPBs with Styx SSMs, six Poluchat Class large patrol craft, four P-6 Class MTBs, four T-4 Class medium landing craft all of Soviet supply.

Army

30,000 men. Seven armoured, eight mechanised infantry, 14 motorised infantry and two commando battalions; 13 field and ten AA artillery battalions.

Reserves

Not known.

Para-Military Forces

Border Guards — 1,500; People's Militia — 2,500; Police — 8,000.

Equipment

Soviet small arms; 200 T-34s, 100 T-54/-55 MBTs; 100 BTR-40/-50, 250 BTR-152 APCs; 100 76 mm and 85 mm field guns, 80 122 mm howitzers and 100 mm anti-tank guns, 150 14.5 mm, 37 mm, 57 mm and 100 mm AA guns, some SA-2 and SA-3 SAMs.

Army uniform

Black, blue or khaki berets, khaki shirt and trousers, black boots, olive web equipment, Russian and American pattern steel helmets.

History of the Army

The three colonial powers, France, Britain and Italy, all maintained token native forces in their domains; for Britain it was the Somaliland Scouts — a romantic, camel-mounted unit — and France had her usual colonial troops. It is from the amalgamation of these forces that the present day Somali Army has sprung.



Somaliland Scouts 1960. Drill on the 3-inch mortar (81 mm). Note the 1937 pattern British webbing equipment (Soldier magazine).

National history

From the late 19th century Somalia had been split up into protectorates under the domination of the European imperial powers, Britain, France and Italy. The Somalis had acquiesced to this development because of their fear of domination by the neighbouring Ethiopian Empire. The French grabbed that part of Somalia around Djibouti in the Gulf of Aden, the British had the neighbouring section eastwards around Berbera and the Italians took the Horn of Africa and the eastern coast down to British-ruled Kenya and including Mogadishu.

In 1900 the Somali Sayyid Muhammed Abdille Hassan, member of a militant Moslem sect, raised a revolt against the British and their Christian missionary policy. He resisted successfully until 1905 before withdrawing into Italian Somaliland. He was again active (against the Ethiopians) from 1908 until 1920.

In 1950 Italian Somalia became an Italian trust territory with the proviso that it should become independent by 1960. The Italians faithfully prepared the state for its forthcoming change of status; democratic elections were held in 1956 and the resultant government (of Abdullah Ise) took the country into independence on July 1 1960.

In British Somalia the Somali National League (SNL) won the elections and decided to join their brothers in neighbouring ex-Italian Somalia.

A coalition government was set up by the SNL and the Somali Youth League (SYL) from Italian Somaliland with Abdi Rashid Shermake (SYL) being premier. In July 1961 Aden Abdullah Osman (SYL) was elected President of the new republic. The traditional tribal nature of local politics, however, caused severe tensions between north and south and in December 1961 an abortive coup was mounted by Army officers of the north. The republic survived this crisis and others during the elections of 1964. In July 1964 a decision by the OAU that all member states would abide within the borders given at the time of achieving independence caused violent Somali reaction. The Somalis were dedicated to gaining control of French Somaliland and certain areas within Ethiopia and Kenya which contained predominantly Somali populations. In fact, the British had conducted a survey of opinion of Somalis living in Kenya prior to independence of that state but even though the result was an overwhelming majority for unity with Somalia, the British refused to implement the decision and diplomatic relations between Somalia and Britain were broken off in March 1963.

Somalia turned to the USSR and China for aid which poured in; guerrilla operations in northern Kenya soon followed.

The Ethiopian Somalis in the Ogaden region had come out in open revolt in late 1963 against their government and the fighting only stopped when the OAU and the Sudanese secured the Khartoum Agreement of March 30 1964.

Sporadic fighting grumbled on in the region, however, and has recently erupted into full-scale war. Initially the USA supported Ethiopia against the Communist-backed Somalis but sides have somewhat changed now since the Somalis expelled their Communist advisers in 1977 and Ethiopia now receives aid from Arab states, Israel, the USSR and Cuba.

In March 1967 over 60 per cent of the population of French Somaliland voted to remain under French rule and the territory is now known as Afars and Issas.

In 1967 Somalia changed tactics, stopped the wars with Ethiopia and Kenya and proceeded to press the case of Somali self-determination by political means; diplomatic relations were resumed with Britain in 1968. Premier Egal (SYL) of Somalia much enhanced his reputation with international diplomatic negotiations and his party won an overwhelming victory in the elections in March 1969. All was not well with electoral practice, however, and the newly elected President Shermarke was assassinated by a member of the police on October 16. Five days later the Army seized power, dissolved the National Assembly and suspended the constitution. The new leader was General Mohammed Siyad Barreh who became chairman of the Revolutionary Council. Egal's initia-

tives were broken off, the US Peace Corps expelled and more military aid sought from the USSR. Soviet naval facilities were set up in Berbera, the Somali armed forces were equipped with Soviet weapons and the Chinese built roads and supplied technical advisers.

The honeymoon with the Communists ended on November 13 1977 when Somalia broke off diplomatic relations with the USSR alleging that the Soviets had been plotting with the Ethiopians to invade them. Similar allegations were made about the Cubans and all personnel, bases and facilities belonging to the two countries were declared unwanted and had to be removed within seven days.

Attempts by the Somalis to find alternative supplies of arms have since met with only minor success, Iraq and Iran have sent small arms but the UK and USA both refused to commit themselves.

The Democratic Republic of the Sudan

Population	—	18.65 million
Estimated GNP 1974	—	$2.8 billion
Defence budget 1976	—	$131.4 million

Armed Forces
Voluntary armed service.

Air Force
1,500 men, 27 combat planes. One interceptor squadron with ten *Fishbeds,* one FGA squadron with 17 ex-Chinese *Frescoes,* five BAC-145s and six Jet Provost Mk 55s, three Pembrokes.

Transport planes are five *Cokes,* four F-27s and one DHC-6.

Helicopters are ten *Hips.*

On order are 15 Mirage fighters, six C-130Ms, four DHC-5D transports and ten Puma helicopters.

Navy
600 men. Three ex-Iranian and six large patrol boats, six small, ex-Yugoslavian patrol craft and two landing craft.

Army
50,000 men. Two armoured, seven infantry and one parachute brigades; three field artillery and three AD artillery regiments, one engineer regiment. 1,000 soldiers are currently in Lebanon with the Arab Peace-keeping force.

Reserves
Not known.

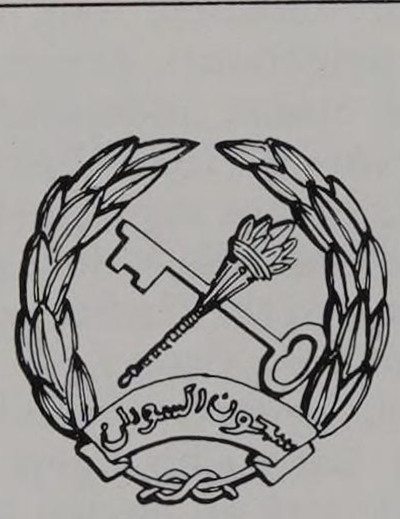
Para-Military Forces
National Guards — 500; Republican Guards — 500; Border Guards — 2,500.

Equipment
NATO and Soviet small arms; 70 T-54s, 60 T-55 MBTs; 30 T-62 Chinese light tanks; 50 Saladin and 45 Commando armoured cars; 60 Ferret scout cars, 100 BTR-40/-50/-152s, 60 OT-64s and 49 Saracen APCs. Field artillery pieces include 55 old 25 pdrs, 40 100 mm, 20 105 mm and 18 122 mm guns and 30 120 mm mortars. There are 30 85 mm AT guns. AA guns include 80 Bofors 40 mm and 80 Soviet 37 mm and 85 mm pieces. On order are French AMX-10 APC.

Army uniform
Blue or khaki berets, khaki shirt and trousers, black boots, olive web equipment, British or American steel helmets.

History of the Army
Whilst under Anglo-Egyptian control the country had no armed forces as such of her own. Formal military organisations appeared after 1945.

National history
In 1821 Mohammed Ali, Viceroy of Egypt, annexed part of the Sudan for its potential revenues of gold and slaves. Harsh oppression provoked a rebellion which was brutally suppressed; the slave trade flourished until the 1860s when British intervention caused it to be reduced and in 1880 General 'Chinese' Gordon — then governor of the Sudan — launched a crusade to stamp out the practice altogether. This led to a revolt by the Mahdi and the subsequent destruc-



Sudanese Army (present day) silver cap badge



Sudan Defence Force (under British rule)

Sudanese Army cap badges

tion of a 10,000-man Egyptian Army and Gordon's famous death in Khartoum on January 26 1885.

In 1896 the French, anxious to wrest colonial gain from Britain, who then controlled Egypt, sent an expedition to Fashoda on the upper Nile to dam the river and thus cause chaos in Egypt to whom the waters were vital. The British decided to occupy the Sudan and to stop the French plans. Kitchener defeated the Sudanese Army at Atbarah River on April 8 1898 and marched to Fashoda where the French force dug in.

Diplomatic negotiations brought about an Anglo-French agreement of March 1899 that French expansion eastwards into Africa would stop at the Nile watershed. An Anglo-Egyptian condominium over the Sudan was declared in the same year and the country was brought into a scheme of modernisation and development. This gave birth to Sudanese nationalism and in 1921 the United Tribes Society was founded with the aim of political independence for the Sudan. In 1924 unrest broke out but was firmly suppressed by the British and all remained quiet until after World War 2. In 1943 Ismail al-Azhari founded the Ashiqqa (Brothers) — Sudan's first political party and militantly radical in character.

The moderates — led by Sayyid Abd ar Rahman al Mahdi, the son of the Mahdi of the Gordon revolt fame — formed the Ummah or 'Nation' party. In 1951 the Ashiqqa was re-formed as the National Unity Party (NUP) after inter-party relationships in the country had become soured. In 1947 the British had set up a Sudanese legislature including representatives of both the Moslem north and the pagan and Christian south; this caused Egypt to break off unilaterally the Anglo-Egyptian treaty of 1936 and to proclaim that she ruled the Sudan entirely. Not until the Egyptian revolution and the rise to power of Nasser and Neguib in 1953 did the Sudanese look more favourably at their northern neighbours. Britain and Egypt agreed to grant the Sudan independence within three years from February 12 1953 after elections had been held. The Egyptians supported the NUP and hoped that unity of the Nile Valley states would follow; the British favoured the Ummah party but the NUP won an overwhelming victory.

Unrest in southern Sudan, however, forced the NUP to disown its policy of unity with Egypt and Sudan was declared a republic with an elected parliament on January 1 1956. Modern democracy withered in the tradition-steeped sands of the country, however, and on November 16 1958 General Ibrahim Abboud, commander of the Sudanese Army, seized power, dissolved political parties and governed by use of the 12 member Supreme Council of the Armed Forces. Abboud brought about a dramatic upturn in the country's economy and negotiated an agreement with Egypt (November 8 1959) on use of the Nile waters. Attempts to 'Moslemise' the south Sudan did not go so smoothly and in October 1962 many Christians fled the country. In September 1963 a southern guerrilla movement — Anya Nya — confronted the north's domination with armed force. Frustrated politicians in the north, while totally unsympathetic to the plight of their southern countrymen, were quite happy to use the crisis as an excuse to dethrone the military and in Khartoum University during October 1964 a student riot sparked off general disorders that Abboud was unwilling to crush. He resigned and a provisional government under Sirr al Khatim al Kalifah (of the NUP) assumed power under the 1956 constitution and held elections in April-May 1965 from which in June 1965 a coalition government under Mohammed Ahmed Mahjub (of the Ummah party) emerged.

Inter-party squabbles and a total failure to resolve the grievances of the south led to another military coup on May 25 1969 when Colonel Gaafar an Nimeiry seized power.

Syria

Population	—	7.75 million
Estimated GNP 1975	—	$4.7 billion
Estimated Defence budget	—	$1.07 billion

Armed Forces

Selective conscription of 30 months' duration. In addition to the mobilised forces there are 100,000 Army and 25,000 Navy reservists, 8,000 Gendarmerie and 1,500 Desert Guard (Frontier Guards).

Air Force

25,000 men, 395 combat planes. Nine FGA squadrons, four with 80 *Frescoes,* three with 50 *Fitter As,* two with 45 *Floggers.*

Eleven interceptor squadrons with 220 *Fishbeds.*

Transport planes include eight *Crates,* two *Cokes* and four *Curls.*

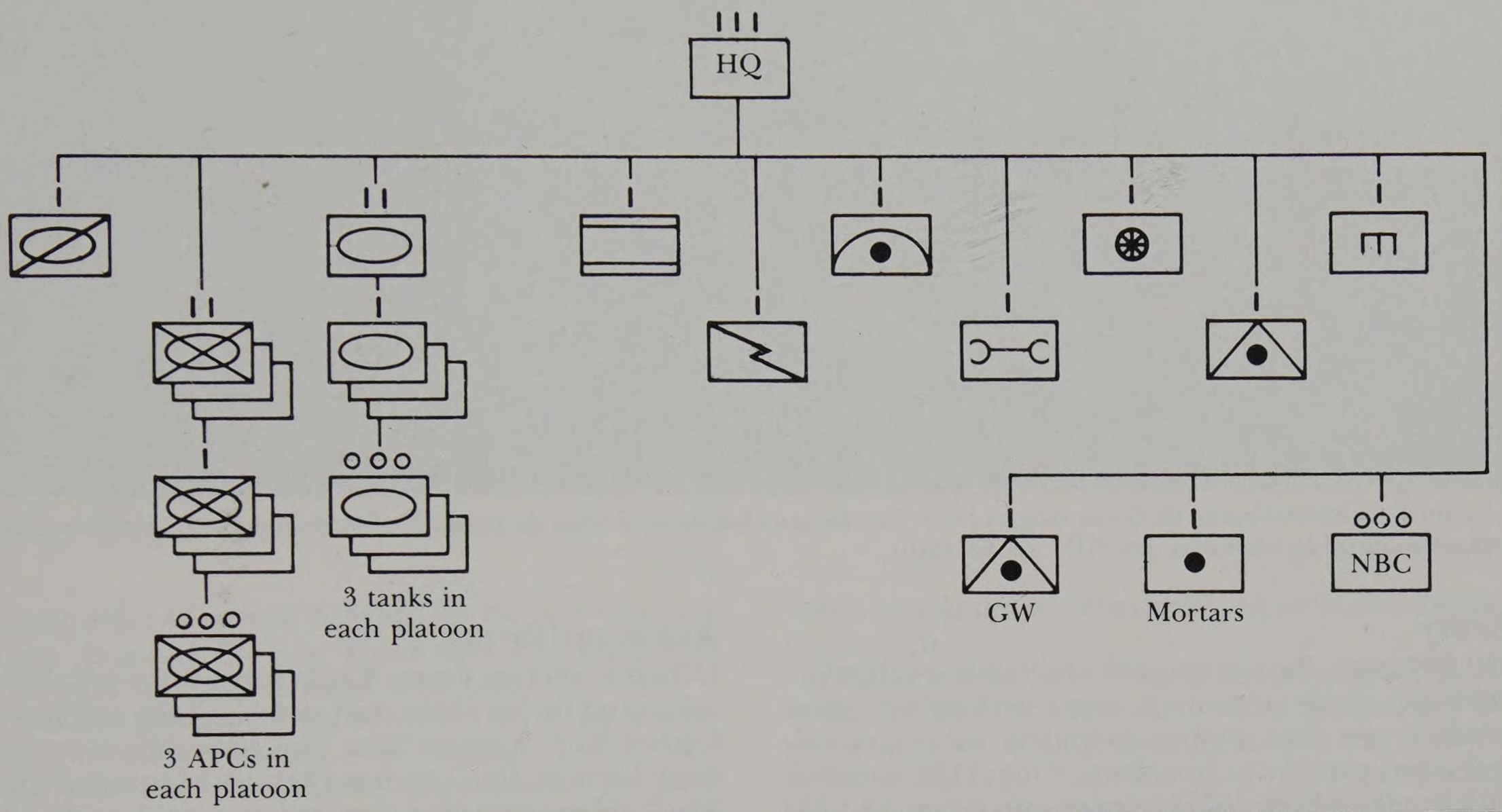
Helicopters are four *Hoplites,* eight *Hounds,* 50 *Hips* and nine *Hormones.* Fifteen Super Frelons and six CH-47Cs are on order.

Training planes include *Mayas, Midgets, Moose* and *Max* from the Soviet bloc and 32 MBB 223 Flamingos.

Navy

2,500 men. Two 'Petya' Class frigates, six 'Komar' and six 'Osa' Class FPBs with Styx SSMs; three minesweepers and eight ex-Soviet P-4 MTBs.

Arab (Soviet pattern) Armoured Infantry Regiment



Arab (Soviet pattern) Tank Regiment



A Syrian T-62 knocked out on the Golan Heights 1973. Note the sand bags secured above the external fuel tanks to guard against damage and explosions caused by small arms fire (IDF spokesman).

Army
200,000 men. Two armoured and three mechanised divisions; three armoured, one mechanised, three infantry and two artillery brigades; six commando and four parachute battalions. One SSM battalion with Scuds and two SSM batteries with Frogs; 48 SAM batteries with SA-2/-3/-6s. 30,000 soldiers are currently in Lebanon with the Arab Peace-keeping Force.

Reserves
100,000.

Para-Military Forces
Gendarmerie — 8,000; Desert Guards — 1,500.

Equipment
Soviet small arms; 200 T-34s, 1,500 T-54/-55s, 800 T-62 MBTs; 100 PT-76 light tanks; 1,600 BTR-40/-50/-60/-152, BMP and OT-64 APCs. Heavy mortars include 120 mm and 160 mm pieces; field artillery has 800 122 mm, 130 mm, 152 mm and 180 mm towed guns and howitzers; 75 SU-100 SP guns; ISU-122/-152s; 140 mm and 240 mm rocket launchers; 30 Frog-7s, 36 Scud SSM launchers.

Anti-tank artillery is equipped with 85 mm and 100 mm AT guns and Sagger, Snapper and Swatter ATGWs.

AA artillery has 23 mm, 37 mm, 57 mm, 85 mm and 100 mm towed guns; ZSU-57-2 and ZSU 23-4 SP guns; SA2/3/6/7/9 SAMs.

On order are Milan ATGWs and Gazelle helicopters.

Army uniforms
Officers' service dress: Khaki tunic worn with khaki collar and tie (or white shirt and black tie) and brown leather Sam Browne belt. The tunic has four gold front buttons, four patch pockets with buttoned flaps. Black shoes are worn. *Cap badge:* a gold eagle with red-white-black shield on its breast; the buttons bear the eagle.

Combat dress: Made by a British firm and consisting of desert-camouflage material jacket, trousers and helmet cover (US-type helmet) in buff, brown and black and British-style 1958 pattern web equipment. *Soldiers' cap badge:* As officers' but all brass.

Regimental badges: These are worn on the tunic collar in brass (see plate) on backing in the facing colour as follows: *General Staff:* Red. *Armour:* Grey. *Artillery:* Dark blue. *Engineers:* Light brown. *Signals:* Dark brown. *Infantry:* Dark green. *Medical:* Maroon velvet. *Pharmacy:* Dark green velvet. *Veterinary:* Light violet. *Military Police:* Red piped black. *Desert Guard:* Yellow. *Gendarmerie:* Black.

Some badge examples (all within a wreath): *Armour:* An advancing tank. *Artillery:* Crossed gun barrels. *Cavalry:* Crossed lances with pennons. *Infantry:* Crossed NATO rifles. *Military Police:* An upright sword on a shield under a scroll.

Badges of Rank — Officers (gold, worn on the shoulder, shoulder boards in the facing colour edged gold): *General:* Three eagles over crossed sabres. *Lieutenant General:* Two eagles over crossed sabres. *Major General:* One eagle over crossed sabres. *Brigadier:* An eagle over a triangular arrangement of five-pointed stars each bearing the eagle in the centre. *Colonel:* A smaller eagle over two stars placed



Captured Syrian 120 mm mortars (IDF spokesman).

side-by-side. *Lieutenant Colonel:* An eagle over a star. *Major:* An eagle. *Captain:* Three stars. *First Lieutenant:* Two stars. *Second Lieutenant:* One star.

Soldiers (white chevrons, worn point up except where noted otherwise): *First Sergeant:* Three chevrons over two five-pointed stars. *Master Sergeant:* Three chevrons over one star. *Staff Sergeant:* Three chevrons. *Sergeant:* Two chevrons. *Corporal:* Two chevrons point down. *Lance-Corporal:* One chevron.

History of the Army

In 1919 the French raised a Syrian Legion for internal security purposes in the country and later augmented it with an armed gendarmerie which brought the total Syrian armed strength up to 8,000 men. At the outbreak of World War 2 General Weygand, French military commander in Syria, brought the strength up to about 15,000 composed of Circassians, Armenians and Druses as well as Arabs.

In 1945 a British military mission was appointed and Syrian officers went to Egypt for training.

By May 1948 the Syrian Army numbered 8,000 men and a mechanised brigade was mobilised and active in the invasion of Palestine.

National history

Syria in modern times was born out of the Allied division of the Ottoman Empire following World War 1 and by the action of the son of Sharif Husayn ibn Ali of the Hejaz who entered Damascus in October 1918 with Lawrence of Arabia's victorious Arab horde and seized Syria proclaiming himself King Feisal I. After World War 1 Syria fell under French mandate which was very unpopular with the inhabitants who asked that either the USA or Britain replace the French.

France had to fight Feisal's forces to establish the mandate; he was defeated and fled the country but was made king of neighbouring Iraq by the British in 1922. Originally Lebanon was part of French-mandated Syria but in 1922 it was declared a separate entity.

Syrian nationalist resistance to French rule led to the Druse revolt in 1925 in which a sizeable French force was defeated; it took two years of active military operations to put down the revolt. Subsequent French efforts to compel acceptance of a French-designed constitution for Syria were troubled and no solution was found until 1932. A Franco-Syrian treaty was agreed upon in 1936 but never ratified by France.

In June 1940 France collapsed before Hitler and Marshal Petain set up the pro-German Vichy Government with the pro-allied 'Free' French being concentrated under General de Gaulle.

The French regimes in Lebanon and Syria were Vichy but in June 1941 British and Free French forces invaded both countries from Palestine; by mid-July both states were under Allied control. In March 1943 Free France granted Syria limited independence but in 1946, under British and nationalist pressure, both Syria and Lebanon achieved full independence from France.

Following the humiliating failure of the Arab offensive against Israel in 1948-49, there was a military coup in Syria in March 1949 when Colonel Husni az Zaim overthrew the government of Shukri al Kuwatli and became dictator until August that year when he was himself overthrown and executed by

Colonel Sami al Hinnawi who in turn was ousted in the following December by Colonel Fawzi Salu. In November 1951 Colonel Adib ash Shisakli (one of Salu's conspirators) removed Salu and became dictator in his turn. Shishakli was of the Arab Socialist Union which was loosely allied to the Ba'ath socialist party but he parted company with them in favour of the Syrian Socialist Nationalist Party (SSNP) — a fascist-style organisation — and the Arab Socialist Union joined with the Ba'ath party to overthrow Shishakli in yet another military coup in February 1954 which put Colonel Faisal al Atassi in power. He then turned on the SSNP, suppressed it and purged the Army of its supporters. The Ba'ath party were now firmly in power but were nervous of pro-western interference from neighbouring Iraq (which was then pro-British). In February 1958 Syria gave up its sovereignty to join with Nasser's Egypt in the United Arab Republic, of which it became the northern province.

The arrogance of the Egyptian officials who flooded into Syria soon cooled such high-minded idealism, however, and in September 1961 a group of right-wing Syrian officers staged another coup and re-established Syria's independence, pushing the pro-Egyptian Ba'ath party aside.

The Ba'athist military then carried out a counter coup in March 1963 and a coalition including pro-Nasser elements was set up. The right-wingers fled the country. The previous month the Iraqi Ba'ath party had overthrown its monarchy and set up a dictatorial republic and it seemed possible that Syria and Iraq might become one state but Egyptian pressure stopped this manoeuvre. This led to an eighth coup in October 1964 in which a Ba'athist military dictatorship was set up in Syria and pro-Nasser elements of the state were purged.

New leaders included Major Generals Salah al Jadid and Hafiz al Asad. In May 1965 the party split and in February 1966 a ninth coup removed Amin al Hafiz who fled to Lebanon to set up a Ba'ath party in exile. Chief of state was Nureddin al Atassi until November 13 1970 with real power held by Colonel Salah al Jadid when the present ruler (head of state Ahmed al Khatib, premier Hafiz al Asad) seized power.

The Republic of Tunisia

Population	—	6.06 million
Estimated GNP 1977	—	$4.8 billion
Defence budget 1977	—	$156 million

Armed Forces

There is selective male conscription (at age 20) of one year's duration with 13,000 of the total 22,000 servicemen being conscripts. Students can have conscription deferred; married men or single sons on whom parents depend are excused military service liability.

Air Force

1,700 men (500 conscripts), 18 combat planes. One fighter squadron with ten F-86Fs, one COIN squadron with eight MB-326Bs; two G-222 transports; six Alouette II, six Alouette III and one Puma helicopters.

Trainers include 12 SF-260Ws and 12 F6s. On order are 12 MB-326G/K COIN planes.

Navy

2,500 men including 500 conscripts. One ex-US destroyer, one ex-French corvette, one minesweeper, three FPBs with SS-12 SSMs and ten coastal patrol boats. On order are one frigate and one FPB with SSMs.

Army

18,000 men including 12,000 conscripts. Two 'combined' regiments, one 'Sahara' regiment (with camel-mounted troops — deployed in the south), one para-commando battalion, one artillery and one engineer battalion.

Reserves

Not known.

Para-Military Forces

Gendarmerie — 5,000; National Guards — 4,000.

Equipment

NATO small arms; 30 AMX-13s, 20 M-41 light tanks, 20 Saladin and 15 EBR armoured cars; ten 155 mm and ten 105 mm SP guns; 40 mm AA guns.

On order are Chaparral SAMs and 40 Austrian Kürassier SP AT guns. West Germany supplies transport, signals, engineer and medical equipment; the USA provides Jeeps and Dodge 4 x 4 and 6 x 6 trucks.

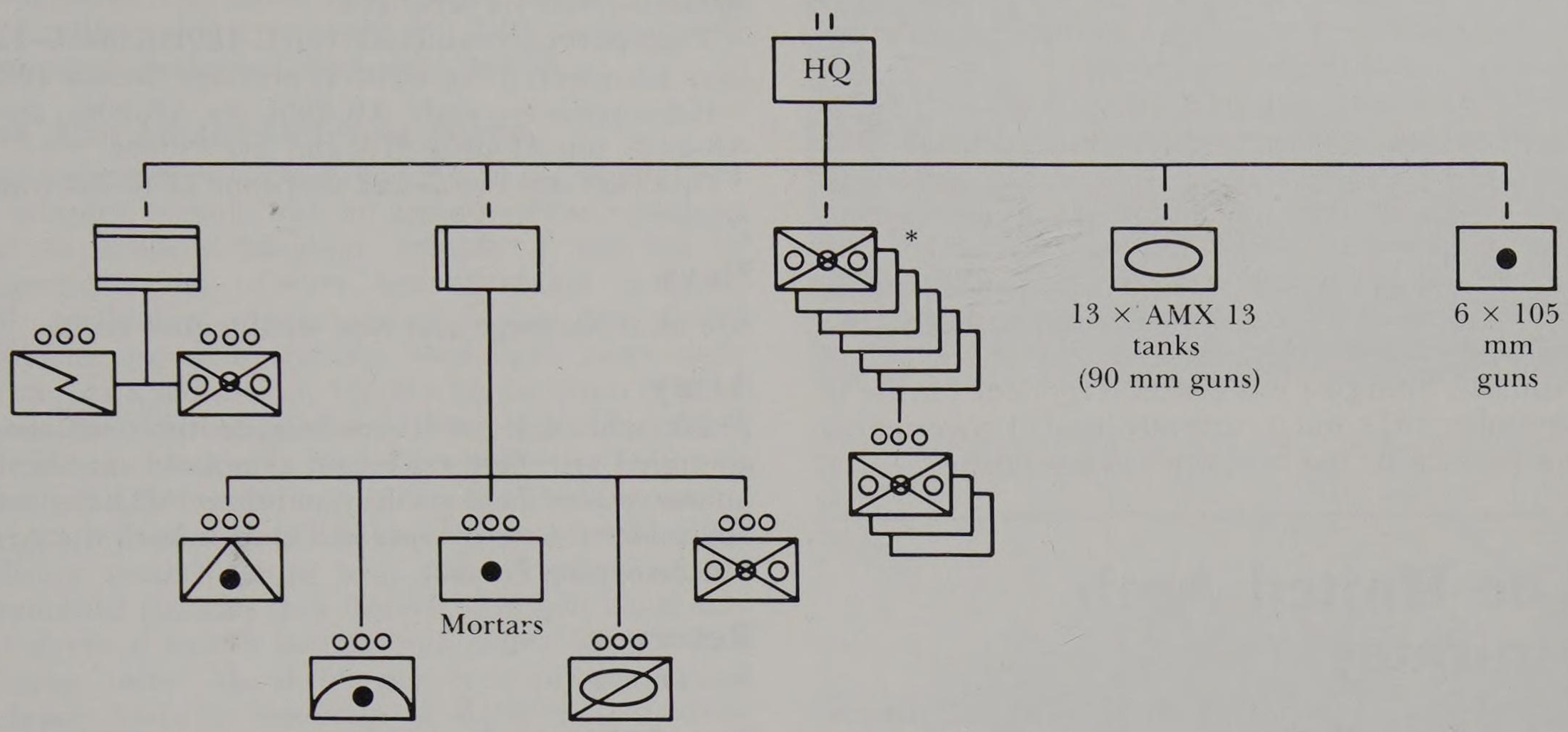
Army uniform

Light khaki service dress with brass buttons, black shoes; blue berets for soldiers; light khaki peaked caps for officers. Olive green combat clothing, US-pattern helmets and webbing equipment.

History of the Army

In 1955 a police force was founded; in 1956 the Army was set up using part of the police force. France presented the newly independent state with a mixed

Tunisian 'Mixed Regiment'



*In peacetime only four companies are active

regiment made up of Tunisian recruits and this has been the basis of the existing Army.

National history

In 1830 France wrested Algeria from the Ottoman Empire and she, together with Britain, meddled in Tunisian politics to suit her own imperialistic ends. In 1878 the British agreed to France being dominant in Tunisia in return for agreement that Britain could occupy Cyprus. In 1881 France invaded Tunisia and took from the ruling Bey (Muhammed as Sadiq) all authority for dealings in defence and foreign affairs.

The Convention of Marsa (1883) made French control complete; the protectorate lasted until 1956. In 1907 aspiring Tunisian patriots founded the Young Tunisian Party (YTP) dedicated to achieving independence. Tunisia rallied behind France in World War 1 but this was only a temporary reconciliation and the following Russian Revolution helped feed the fires of independence even further. In 1920 the Destour Party (as the YTP was now called) presented a demand to the Bey and to the French that Tunisians should have equal rights with Europeans; Abd al Aziz al Thaalibi (Destour Party leader) was arrested but two years later the Bey, Mohammed an Nasir, repeated the request to French President Alexandre Mitterand on threat of his abdication. His palace was surrounded by French troops and the demand was dropped.

In 1934 a young Tunisian lawyer, Habib Bourgiba, left the Destour Party to found the Neo-Destour Party (now the Socialist Destour Party). Bourgiba's vigorous leadership displaced the Destour Party and worried the French, who arrested him in 1938 and deported him to France when public disturbances broke out in the colony. The Nazis handed him over to the Italians in 1942 where he was wooed by Mussolini but refused to co-operate. Bourgiba returned to Tunisia in 1943; when the Free French invaded they deposed the Bey (Mohammed al Munsif) and Bourgiba fled to Egypt. He was allowed to return to Tunisia by the French in 1951 where he urged political development and was re-arrested.

Tunisian nationalists now mounted a terrorist campaign against the French and in 1954 Bourgiba supervised independence negotiations. On his victorious return to Tunisia, Bourgiba's leadership was challenged by the one-time secretary of the Neo-Destour Party, Salah ben Youssef, who organised an uprising in his favour in the south of the country. This was quickly put down and Youssef fled to Europe. He was assassinated by unknown killers in West Germany in 1961.

In March 1965 Tunisia became fully independent

with Bourgiba as Prime Minister; on July 25 1957 a republic was declared and the Beys were deposed. Bourgiba was now Prime Minister and President. France (under de Gaulle) still maintained troops in the country, however, and was unwilling to withdraw them in view of the war in Algeria.

In 1961 French paratroopers inflicted over 1,000 casualties on civilian demonstrators outside the French base at Bizerta. The French finally evacuated their troops in 1963 and Franco-Tunisian relations have been tense ever since. Tunisia was a moderate in the early stages of the Arab-Israeli conflict but in 1967 she reacted in common with other Arab states although she is still regarded as one of the less radical countries. Bourgiba was elected President for life in November 1974 and is currently head of government — a position he has held since independence.

The United Arab Emirates

(Abu Dhabi, Dubai, Ajman, Umm al Qaiwain, Fujairah, Kalba, Ras Al Khaimah and Sharjah, merged into the new entity in May 1976; difficulties arose recently in allocation of command and staff positions among the participants).

Population	—	690,000
Estimated GNP 1976	—	$8.5 billion
Defence budget 1977	—	$100.6 million

Armed Forces

Voluntary military service.



Air Force

1,800 men, 38 combat planes. Two FGA squadrons with 24 Mirage Vs and eight Hunters; one COIN squadron with six MB-326s.

Transport planes include two C-130Hs, one G-222, four Islanders, three DHC-4s and one Cessna 182.

Helicopters are eight AB-205s, six AB-206s, three AB-212s, ten Alouette IIIs and five Pumas.

On order are two G-222 and four DHC-5D transports.

Navy

800 men. Six large and nine small patrol craft.

Army

23,500 men. A Royal Guard brigade, three battalions equipped with light tanks and armoured cars; seven infantry, three field artillery and three AD battalions. 700 soldiers are currently in Lebanon with the Arab Peace-keeping Force.

Reserves

Not known.

Para-Military Forces

Not known.

Equipment

NATO small arms; 80 Scorpion light tanks, 125 Saladins, six Shorland and Panhard armoured cars, 60 Ferret scout cars, Panhard M-3 and 30 Saracen APCs, 22 old 25 pdr field guns and 105 mm guns, 16 AMX 155 mm SP howitzers; 81 mm mortars, 120 mm RCL, Vigilant ATGWs and Rapier SAMs. Landrover and Bedford soft-skinned vehicles.

Army uniforms

Black, blue or khaki berets (red and white shmarg for parades) khaki shirt and trousers (officers have a khaki, British-style service dress jacket with open neck, four-button front, four patch pockets with buttoned flaps), desert boots (chaplis for barrack wear), olive web equipment, British steel helmets and rank badges.

History of the Army

After World War 2 the 'Trucial Oman Levies' was raised which in about 1955 became the 'Trucial Oman Scouts' (TOS), from 1970 the force has been known as the 'Union Defence Force'. From its inception it has been officered by British and later Pakistani (Baluchi) and Arab officers seconded for limited periods. The TOS uniform was a red and white

Left *Abu Dhabi Defence Force — 81 mm mortar drill* (Soldier magazine).

chequered shmarg or headcloth with crossed khunjah (dagger) badge for officers, single khunjah for soldiers; black agul (head cords), grey-blue shirt over khaki slacks, red stable belt, chaplis (shoes). British 1937 pattern (now replaced by 1958 pattern) web equipment. Badges of rank were British.

The Abu Dhabi Defence Force

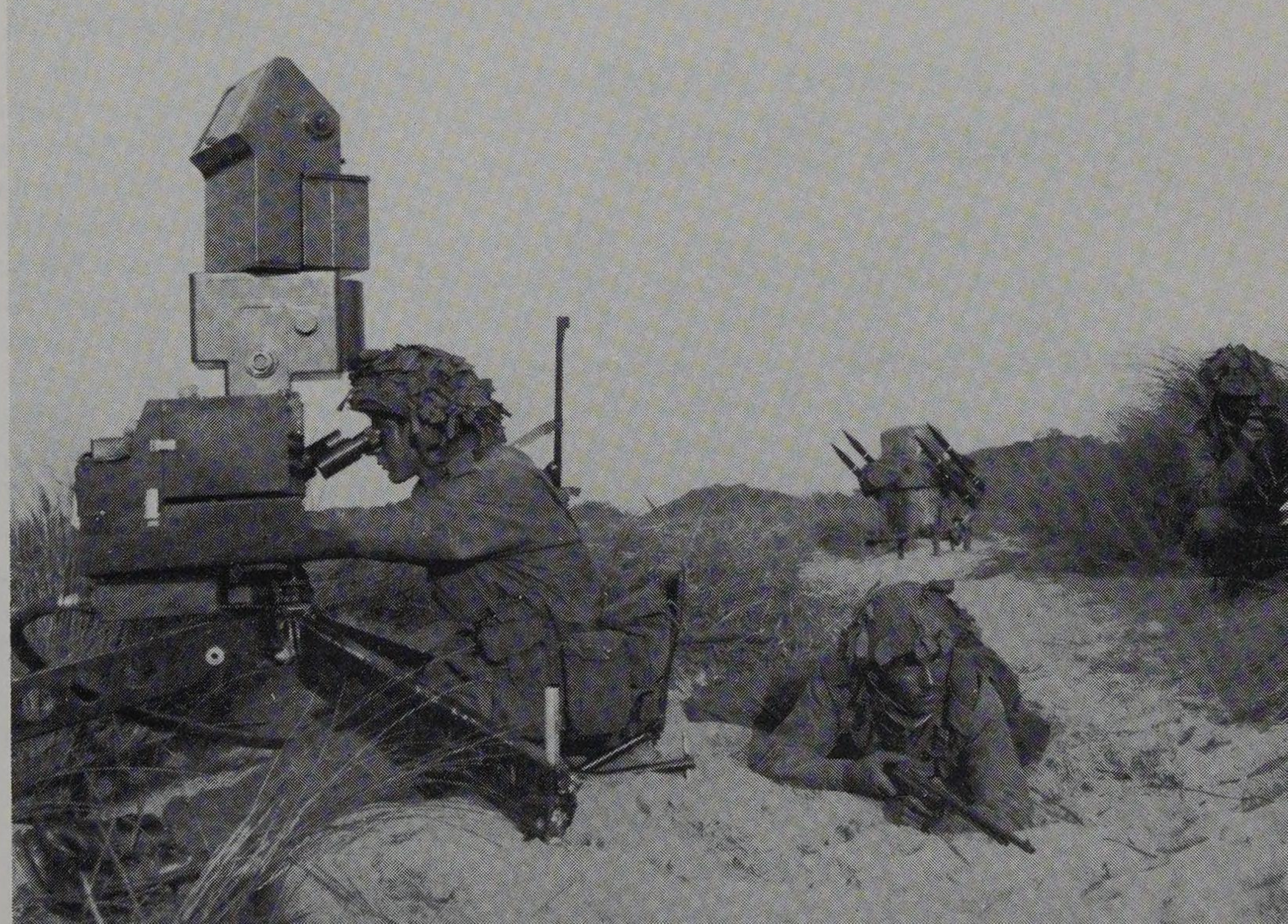
This formation was raised in 1965 at the strength of an infantry brigade with an armoured car squadron and an artillery battalion. Initially it was led by seconded British officers, later Pakistani (Baluchi) and Jordanian officers also joined the force. Uniform: grey-blue shmarg, black agul, silver eagle badge, brick red shirt (to blend with the sands of Liwa in the Abu Dhabi operational area), grey-blue stable belt, khaki slacks, buff desert boots for officers, brown chaplis for the men. The armoured car squadron wore black berets. Officers carried British light infantry pattern canes with silver knobs and for ceremonial parades they wore lightweight khaki service dress of British pattern with brown leather Sam Browne belts. About 50 per cent of the Union Defence Force is made up of Baluchis and other foreigners.

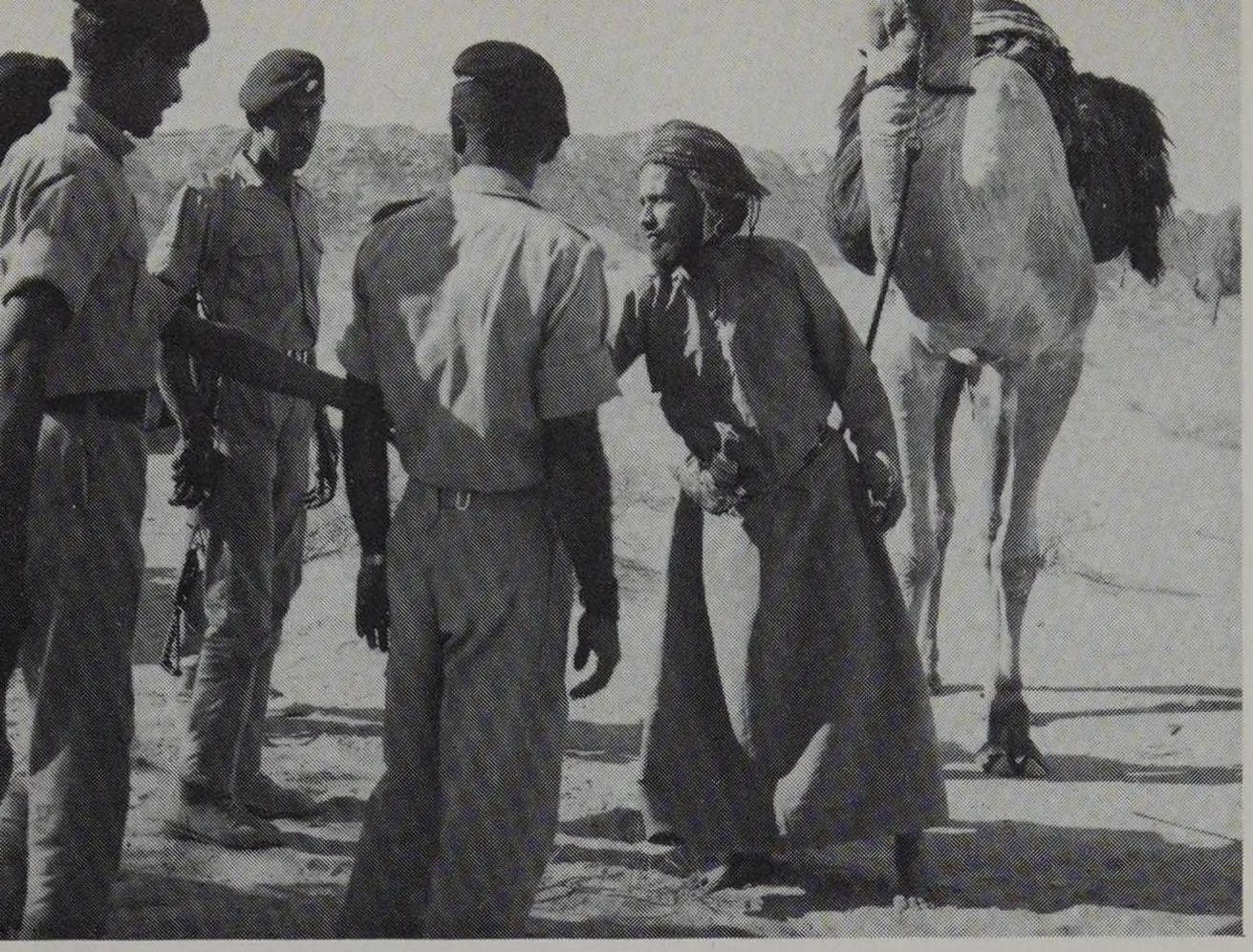




Above right *Abu Dhabi Defence Force Pipe Band. The rank badges are completely British; the brick red shirts blend in with the sands of the operational areas* (Soldier magazine). **Right** *Abu Dhabi Defence Force — Saladin armoured cars with 76 mm guns.* **Below right** *British-built Rapier SAM deployed in desert terrain* (BAC). **Below left** *Detail of the uniform of a Major in the Signals, Abu Dhabi Defence Force. The shirt is brick red, the rank badge has a silver eagle on gold daggers, the shoulder title is silver with brass, the sleeve patch is white over light blue with a red flash. The shmarg is red and white* (Royal Signals Museum).







Abu Dhabi Defence Force. A camel driver is checked by a patrol. Note the Sterling SMG and the British-style wrist band badge of the Sergeant Major (furthest right of the soldiers) (Soldier magazine).

National history

In 1820 the rulers of these states signed a treaty with Britain and later treaties placed them firmly under British sway.

Britain withdrew from the Persian Gulf in 1971 and the existing agreements were replaced by a treaty of friendship between Britain and the United Arab Emirates (UAR) which had been formed on December 2 1971. On December 6 1971 the UAR joined the Arab League and on December 9 UNO.

The President now is Sheikh Zayed bin Sultan al Nahayan (ruler of Abu Dhabi).

The Yemen Arab Republic (North)

Population	—	6.9 million
Estimated GNP 1973	—	$830 million
Defence budget 1976	—	$60 million

Armed Forces

39,850 men; there is three-year military service liability for males.

Air Force

1,500 men, 22 combat planes. One light bomber squadron with 14 *Beagles*; one fighter squadron with eight *Frescoes* and some *Fishbeds*. Transports: C-47s, two Skyvans, some *Crates*. Trainers: four *Midgets*, 18 *Moose*. Helicopters: *Hounds* and AB-205s.

Navy

750 men. Five ex-Soviet 'Poluchat' Class large patrol craft, three ex-Soviet P-4 MTBs.

Army

37,600 men. Three infantry divisions (seven active brigades and three in reserve), one parachute and three commando brigades; two armoured and two field artillery battalions, one AA artillery battalion. 500 soldiers are currently in Lebanon with the Arab Peace-keeping Force.

Reserves

Not known.

Para-Military Forces

Tribal levies — 20,000.

Equipment

Soviet small arms; 30 T-34s and T-54 MBTs, 30 Saladin armoured cars, some Ferret scout cars; 120 BTR-40/-152 and Walid APCs. Artillery pieces include 50 76 mm and some 122 mm towed guns; 50 SU-100 SP guns; 82 mm and 120 mm mortars; 75 mm RCL; 37 mm AT guns and Vigilant ATGWs. On order are more field and AA guns.

Army uniforms

Black beret or khaki peaked cap, khaki shirt and trousers, olive web equipment, chaplis.

History of the Army

It was not until the 1960s that any credible standing Army was formed and this came as part of the Egyptian support for the republicans in the civil war against the royalists.

National history

Early in this century the Yemen formed part of the Ottoman Empire; during World War 1 the ruler (Imam) Yahya of the Hamid ud Din dynasty joined in the Arab revolt against the Turks in the Hejaz and co-operated with Lawrence of Arabia. Yahya died in 1948 and was succeeded by his son Ahmed who secured his position by executing four of his 12 brothers. Ahmed ruled until 1962, dying in the September.

Imam Ahmed had been ultra conservative and allowed his country minimal contact with the outside world; in 1956 he sent his son, Crown Prince Mohammed al Badr to Cairo for training where he fell under Nasser's spell and arranged for an Egyptian military mission to train the Yemeni Army. Russian and Chinese civil engineers entered the country and built the deep water port at Hodeidah and the road from there to Sana.

On September 26 1962, one week after Imam Ahmed's death, a coup d'état overthrew the Imamate. Leaders of the coup were Mohammed's Chief of Staff (Brigadier Abdullah Sallal who had been trained in Iraq) and Lieutenant al Moghny (Egyptian trained). Egyptian forces flooded into the Yemen to reinforce the republicans; Imam Mohammed fled into Saudi Arabia and received support from that kingdom and from Jordan.

The resultant guerrilla war dragged on spasmodically until 1967 when Egypt, after losing the Six-Day War against Israel, withdrew her troops but royalist disorganisation prevented them from capitalising on republican weakness.

On November 5 1967 Sallal was overthrown while out of the country on a visit to Moscow and replaced by General Hassan al Amri, but the royalist position was also weakened by withdrawal that month of the British from the neighbouring Aden Federation and the seizure of power there by the National Liberation Front — a regime violently hostile to the Yemeni royalists. Fresh influxes of Russian arms and advisers strengthened the republican hold on the country and in July 1969 an agreement was reached with a coalition government (royalists, republicans and third party) being set up.

The People's Democratic Republic of South Yemen

Population	—	1.79 million
Estimated GNP	—	$500 million
Defence budget	—	$43.7 million

Armed Forces
21,300 men with conscription.

Air Force
2,000 men, 33 combat planes. One bomber squadron with six *Beagles*; one fighter squadron with 12 *Fishbeds,* one interceptor squadron with 15 *Frescoes.* Transports: four *Crates,* three *Cokes* and some C-47s. Helicopters: eight *Hounds* and *Hips.* Trainers: three *Midgets.*

Navy
300 men. Two ex-Soviet SO1 Class submarine chasers, two ex-Soviet P-6 Class MTBs; three ex-British 'Ham' Class minesweepers, six small patrol craft, two ex-Soviet 'Polnocny' Class landing craft.

Army
19,000 men. Ten infantry brigades each of three battalions; two armoured battalions, one artillery brigade.



Aden Protectorate Levies. A guard turns out for inspection by an officer of the Prince of Wales' Own Regiment. Note the footwear (Soldier magazine).

Reserves
Not known.

Para-Military Forces
Public Security Force — 1,500; Popular Militia — a levée en masse.

Equipment
A mixture of NATO and Soviet small arms; 200 T-34 and T-54 MBTs; ten Saladin armoured cars, ten Ferret scout cars.

Field artillery; old 25 pdrs; 105 mm Pack howitzers, 122 mm and 130 mm howitzers, 120 mm RCL. AA artillery: 37 mm, 57 mm and 85 mm towed guns, 23 mm SP guns; SA-7 SAMs. Five hundred men are currently serving in the Lebanon with the Arab Peace-keeping Force.

Army uniforms
Blue or khaki berets, khaki shirt and trousers, olive web equipment, boots or chaplis.

History of the Army
During the British protectorate the Aden Protectorate Levies were raised and attached to the RAF Regiment then serving there. By 1961 they had a strength of one infantry battalion and one armoured car squadron. Just prior to independence they formed the cadre of the Federal Army which then helped the NLF to seize power.

Uniform in British days was khaki drill shirt and trousers, khaki head-cloth without badge or dark blue beret with crossed daggers badge; British rank badges; chaplis. The APL camel troop had a green and white standard.

The Federal National Guard was a militia based in forts and officered by British contract officers. The uniform was a black head-cloth, khaki shirt and trousers, dark green cummerbund, black leather belt and cross straps. There was also the Hadramat Bedouin Legion in the eastern Aden Protectorate.

National history

Until 1967 the country was known as the Aden Protectorate and was part of the British Empire; in the last few months of imperial rule Britain had set up the South Arabian Federation but native politics were split into the mutually hostile National Liberation Front (NLF) and the Front for the Liberation of South Yemen (FLOSY). A few days before independence the Federal Army threw its weight in with the NLF and crushed FLOSY; the NLF took over power and declared itself sole legitimate political party in the new state. Aden had been at odds with the Yemen prior to 1962 but had then chosen to aid the royalists in their fight against the republicans. The NLF now came out firmly for the Yemeni republicans and this had considerable effect on the final success of the republicans in that country.



Left *Aden Protectorate Levies. A Captain (left), First Lieutenant and Private (right). The shoulder titles read 'APL'* (Soldier magazine). **Below** *Aden Protectorate Levies pulling a Bedford 3-ton truck up a typical country track* (Soldier magazine).



Section 4

WEAPON CHARACTERISTICS

Armoured fighting vehicle characteristics

The following are some of the major armoured vehicles of various categories currently in use with Middle East armies; data on other indigenous designs will be found under the national headings. The conventions followed in the short specifications are:

A Number in crew.
B Combat weight.
C Hull length; hull width; height to top of turret — all in metres.
D Main armament; types of ammunition; quantity carried.
E Auxiliary armament.
F Engine — petrol unless otherwise specified.
G Power/weight ratio.
H Armour thickness (at thickest point, usually hull front, unless specified otherwise).
I Maximum road speed.
J Maximum road range.
K Fuel capacity.
L Wading characteristics (normal; deep regime; schnorkel) in metres.
M Night fighting equipment.
N User trials.
O Into service.
P Possible accessories.

Not all these headings may apply, or may be available, for all vehicles.

American

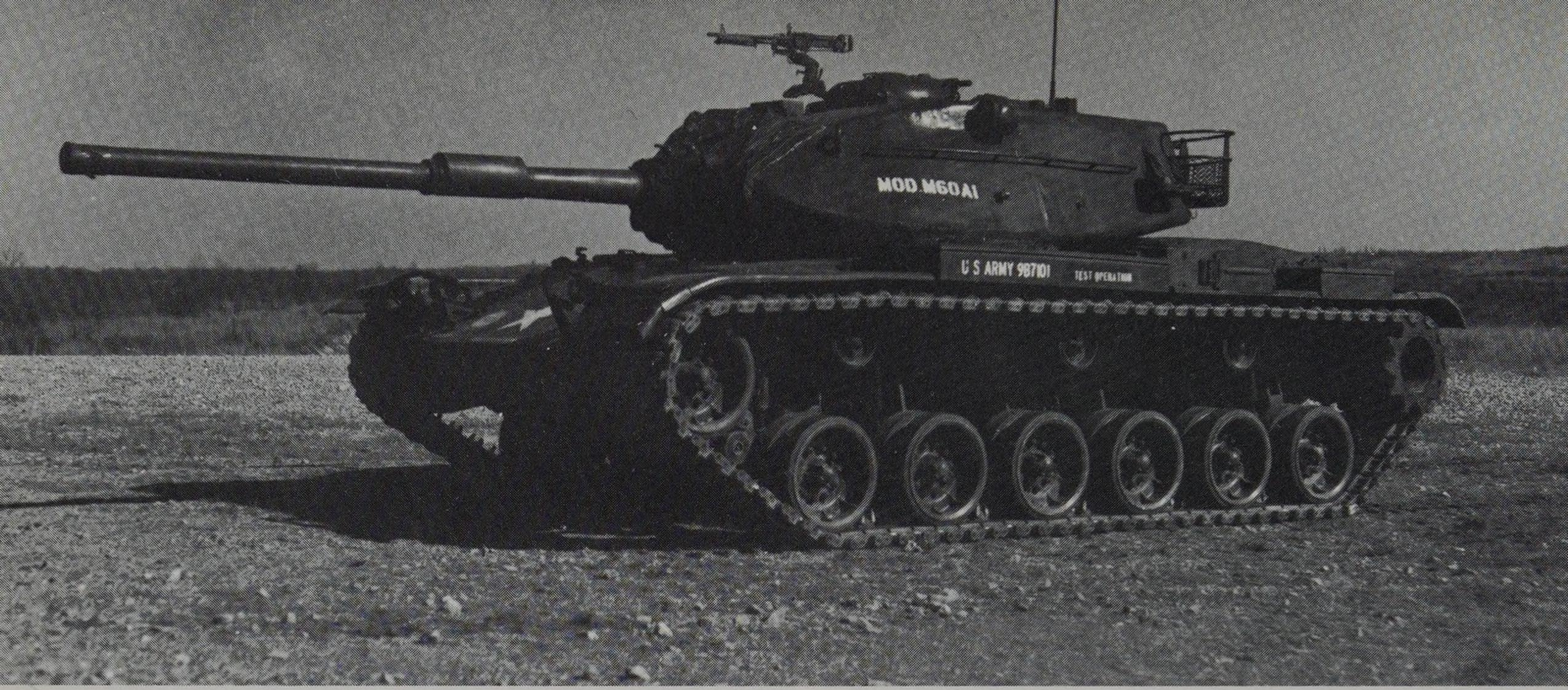
M-48A2C medium tank: A 4 **B** 48 tons **C** 6.9; 3.63; 3.09 **D** 90 mm cannon firing HE, AP, HESH; 60 rounds **E** 1 × 7.62 mm coax MG, 1 × 12.7 mm AAMG **F** 810 hp **G** 16.8 hp/ton **H** 110 mm **I** 50 km/h (30 mph) **J** 250 km (155 miles) **K** 1,230 litres **L** 1.2 **M** infra red. The ageing M-48, also known as Patton II, is still rendering excellent service in many countries. Developed from the M-47 in 1953, it began to be replaced by the M-60 in European armies in 1963.

M-60A1 battle tank: A 4 **B** 46.3 tons **C** 6.95; 3.63; 3.26 **D** British 105 mm cannon firing HE, AP, HEAT; 63 rounds **E** 1 × 12.7 mm AAMG, 1 × 7.62 mm turret MG **F** 750 hp diesel **G** 16.2 hp/ton **H** 110 mm **I** 48 km/h (29 mph) **J** 500 km (310 miles) **K** 1.120 litres **L** 1.2; —; yes, with extra equipment **M** infra red. This is a medium tank, with lower armour protection and higher mobility than such heavier designs as the British Chieftain. It was developed from the M-48A2, and entered service in 1958.

M-113 APC: A 13 **B** 10.4 tons **C** 4.86; 2.96; 2.5 **D** various 20 mm weapons firing AP **E** various **F** 218 hp

A modified M-48 Patton tank with diesel engine, British 105 mm gun and infra red searchlight. Note the variety of 105 mm tank gun ammunition in the foreground (AP).





G 20.9 hp/ton **I** 64 km/h (37 mph) **J** 320 km (199 miles) **K** 305 litres **L** inherently amphibious, propelled by track rotation **M** various, according to role. This is the most numerous armoured vehicle outside the Soviet bloc. Although introduced as long ago as 1958 it has proved itself in all parts of the world. It exists in many variants including ambulance, bridgelayer, command vehicle, mortar carrier, repair vehicle, etc.

Austrian

'Kürassier' tank destroyer: A 3 **B** 17.1 tons **C** 7.78 m (gun forward) 5.58 m (hull only); 2.5 m; 2.36 m **D** 105 mm cannon (range 2.7 km) fed by two large 'revolver' cylinder magazines each holding 6 rounds; rate of fire for first 12 rounds — 1 round each 5 seconds; HEAT, HE, smoke; 43 rounds **E** 1×7.62 mm coax MG, 2,000 rounds **F** Steyr-Puch M6F A 6-cylinder diesel, 300 hp **G** 17.5 hp/ton **H** 20 mm **I** 65 km/h (41 mph) **J** 530 km (331 miles) **K** 400 litres **L** 1 m **M** ?.

British

Scorpion CVR(T) tracked: A 3 **B** 7.83 tons **C** 4.3; 2.2; 2.1 **D** 76 mm cannon firing HE, HESH, smoke, 40 rounds **E** 7.62 mm coax GPMG, 3,000 rounds **F** Jaguar OHC 4.2-litre, 6-cylinder, water-cooled, 195 hp **I** 87 km/h (54 mph) **J** 644 km (400 miles) **K** 391 litres **L** amphibious with screen raised **M** infra red **N** 1971 **O** 1972 **P** Radiac detector; CW detector; Central Alarm System; Sperry Navigator; turret and driver's passive viewers.

Fox CVR(W) L wheeled 4 × 4: A 3 (can be fought by 2) **B** 5.58 tons **C** 4.9; 2.1; 2.04 **D** 30 mm cannon **E** 7.62 mm coax GPMG **F** Jaguar 6-cylinder, water-cooled, 200 hp **G** 25 hp/ton **I** 104 km/h (64.6 mph) **J** 434 km (269 miles) **K** 145 litres **L** 1.01 **N** mid-1968 **O** 1971 **P** Radar GS No 14; Sperry Navigator; CW detector; Radiac detector; Central Alarm System; driver's and turret passive viewers.

Chieftain (MBT): A 4 **B** 51 tons **C** 7.46; 3.5; 2.81 **D** 1 × 120 mm cannon **E** 1 ×7.62 mm coax MG; 0.5-inch ranging MG; 1 × 7.62 mm commander's MG **F** Leyland L60 No 4 Mark 5A 6-cylinder, 730 hp. The variant supplied to Iran is driven by a Rolls-Royce CV 12 12-cylinder engine producing 1,200 hp at 2,300 rpm **H** 150 mm (estimate) **I** 41.2 km/h (25.6 mph) **J** 400 km (248.5 miles) **K** 909 litres diesel **L** 1.07 (4.57 with schnorkel).

Saladin 6 × 6 armoured car: A 4 **B** 11.4 tons **C** 4.87; 2.51; 2.26 **D** 1 × 76 mm cannon **E** 0.3-inch coax MG; 1 × 0.3-inch commander's MG **F** Rolls-Royce B80 Mark 6A 8-cylinder **H** 32 mm **I** 72 km/h (44.7 mph) **J** 380 km (236 miles) **K** 241 litres **L** 1.07 or 2.13 with kit.

Saracen 6 × 6 wheeled APC: A 2 + 10 **B** 10 tons **C** 5.0; 2.51; 2.5 **D** 1 × 0.3-inch MG **F** Rolls-Royce B80 Mark 6A, 8-cylinder, developing 170 hp at 3,750 rpm **H** 16 mm **I** 70 km/h (43.5 mph) **J** 352 km (218.7 miles) **K** 200 litres **L** 1.07 or 1.98 with kit.

Ferret Mark 1 (Liaison) 4 × 4 scout car: A 2-3 **B** 4 tons **C** 3.83; 1.9; 1.4 **D** 1 × 0.3-inch MG **F** Rolls-Royce B60 Mark 6A, 6-cylinder, developing 129 hp at 3,750 rpm **J** 320 km (199 miles) **K** 96 litres **L** 0.914.

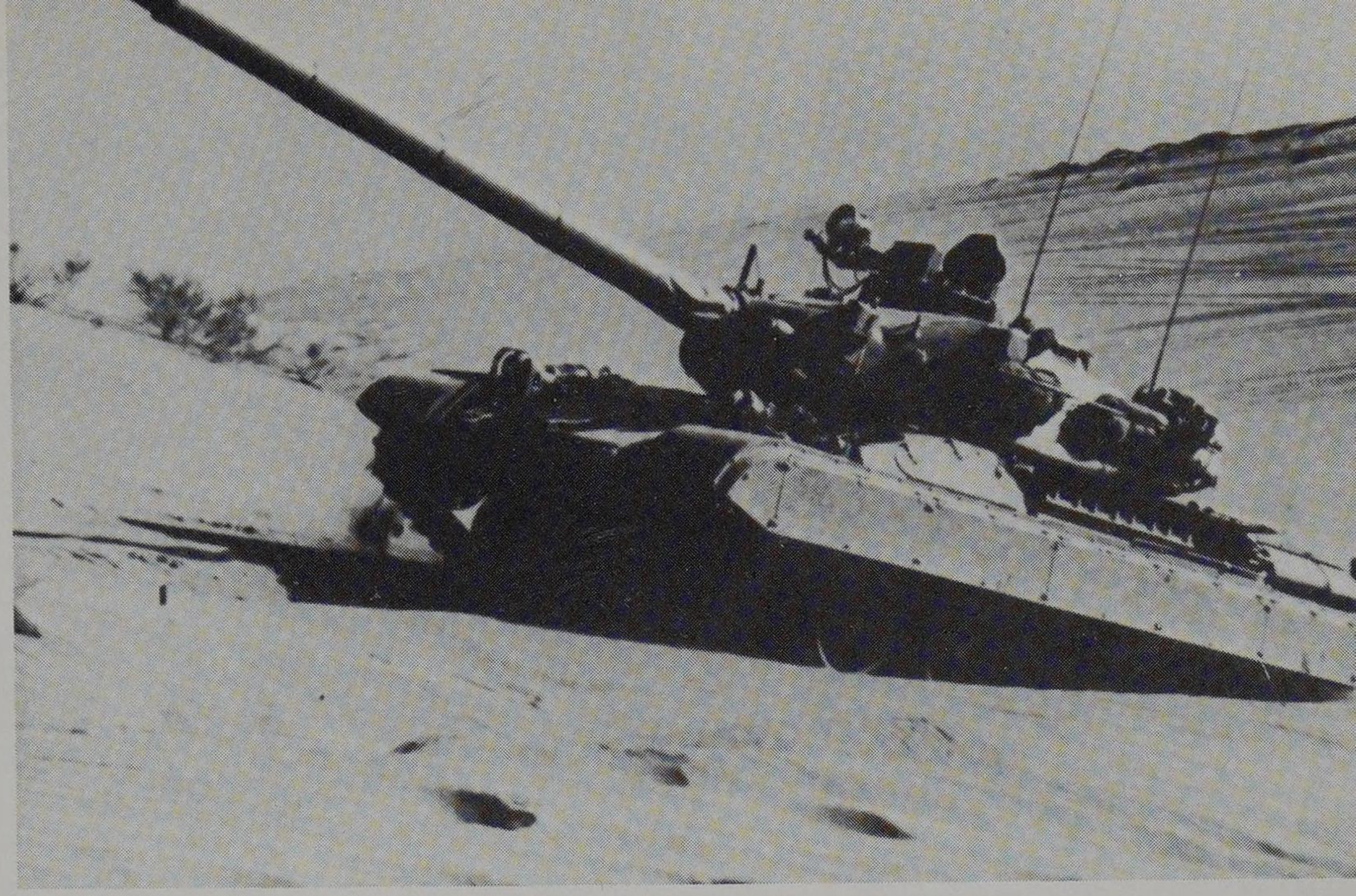
Ferret Mark 2 (Recce): As for Mark 1.

Ferret Mark 5 (GW Launcher): A 2 **B** 6 tons **C** 4.01; 2.13; 2.13 **D** Swingfire SSM **E** 1 × 7.62 mm MG **F** As for Mark 1 **I** 91 km/h (56.5 mph) **J** 320 km (199 miles) **K** 96 litres **L** 0.914 (without kit).

Centurion Mark 13 MBT: A 4 **B** 51 tons **C** 8.76; 3.43; 0.30 **D** 1 × 105 mm cannon **E** 1 × 0.5-inch ranging MG, 2 × 0.3-inch MGs **F** Rolls-Royce Meteor Mark 4B, 12-cylinder, liquid-cooled, developing 650

Weapon characteristics

Left *A US-produced M-60 A1 tank which, with engine and gun modifications, is used by the Israeli Army* (Christopher F. Foss).



Right *The French AMX-30* (Christopher F. Foss).

hp at 2,550 rpm **H** 152 mm **I** 34.6 km/h (21.5 mph) **J** 190 km (118 miles) **K** 1,037 litres **L** 1.45 or 2.74 with kit.

Egyptian

'Walid' 4 × 4 APC (open-topped): This armoured vehicle has a German 'Deutz' air-cooled diesel engine and is very similar in design to the Soviet BTR-40. No further details are known.

French

AML 245/AML 245H90/AML 245-ENTAC armoured car 4 × 4: A 3/3/3 **B** 4.5 tons/5.5 tons/5.2 tons **C** 3.68; 1.93; 2.18/3.79; 1.97; 2.1/3.7; 1.93; 2.2 **D** 60 mm mortar/90 mm cannon/60 mm mortar + 4 ENTAC ATGWs; HE, smoke; HE; AP **E** 1 × 7.5 mm AAMG, 1 × 7.5 mm turret MG common to all versions **F** 90 hp **G** 18.8 hp/ton/16.3 hp/ton/17 hp/ton **I** 90 km/h (54 mph) **J** 550 km (342 miles) **K** 115 litres **L** 1.1 **M** infra red. A well-built and versatile scout vehicle, which in the H90 and ENTAC versions carries weapons capable of destroying tanks. Ammunition capacity is 53 rounds, 12 rounds and 30 rounds + 4 missiles, respectively.

EBR-90 armoured car 8 × 8: A 4 **B** 15 tons **C** 5.56; 2.43; 2.24 **D** 90 mm cannon; HE, AP; 44 rounds **E** 3 × 7.5 mm MGs **F** 200 hp **G** 13.3 hp/ton **I** 100 km/h (60 mph) **J** 600 km (373 miles) **L** 1.2 **M** infra red. Like the smaller Soviet BRDM, the EBR-90 (Engin Blindé de Reconnaissance) has two retractable pairs of central wheels, lowered when moving across country. There is a driver at each end of the vehicle, which is equally fast and manoeuvrable in either direction. An up-gunned version of the EBR-75, it is a dangerous adversary even for tanks.

AMX-30 medium tank: A 4 **B** 35.4 tons **C** 6.63; 3.1; 2.85 **D** 105 mm cannon; HE, AP, HEAT; 50 rounds **E** 1 × 12.7 mm MG, 1 × 7.5 mm AAMG **F** 720 hp multi-fuel **G** 20.4 hp/ton **I** 65 km/h (43 mph) **J** 500 km (300 miles) **K** 850 litres **L** 2.2; yes, with extra equipment **M** infra red searchlight.

AMX13 DCA SP AA gun: A 3 **B** 17.2 tons **C** 5.4; 2.5; 2.7 to turret top (3.8 to top of extended aerial) **D** twin 30 mm cannon HSS-831A L75, 1,200 rounds, rate of fire 2 × 650 rpm **E** nil **F** 250 hp multi-fuel engine **G** 14.7 hp/ton **H** 20 mm **I** 60 km/h (37 mph) **J** 300 km (187 miles) **K** 450 litres **L** 0.6 m **M** uses the AMX 13 chassis.

'Crotale' all weather SP SAM (launch vehicle): A 3 **B** 14.8 tons **C** 6.2; 2.6; 2.4 (with missiles) **D** 4 × single stage, solid fuel rocket-propelled missiles with 5 kg of HE in the warhead, range 0.5-8 km, max height 3,000 m, speed Mach 2.5 **E** nil **F** 230 hp diesel **G** 17.7 hp/ton **H** 5 mm **I** 70 km/h (44 mph) **J** 500 km (312 miles) **K** not known **L** 0.68 **M** . Two vehicles are involved, the acquisition vehicle (with radar) and the launch vehicle; differences are slight. Saudi Arabia is ordering this equipment, which they have called 'Shahine', for 1980. The surveillance radar has a range of 18.5 km (11.5 miles), the target tracking radar a range of 16 km (10 miles). Each missile weighs 85 kg (187 lb) (warhead 15 kg/33 lb) and is 2.98 m long. It takes about 6 seconds for the missile to hit the target at maximum range.

AMX 13 light tank Type D: A 3 **B** 14.7 tons **C** 4.88; 2.5; 2.3 **D** 90 mm cannon **E** 1 × 7.62 mm MG **F** 250 hp, water-cooled **G** 17:1 **H** 40 mm **I** 60 km/h (37 mph) **J** 355 km (220 miles) **K** 480 litres **L** 0.6. The other types have various armaments as shown below: **Type A** 1 × 75 mm cannon and 4 × SS-11 ATGWs;

Above *The French SAM Crotale being launched. Note that the surveillance radar is on the vehicle at the rear while the target tracking radar is mounted on the missile launcher* (Christopher F. Foss). **Below** *A French-built Panhard armoured car (here on service with UN Peace-keeping Force) with MG and mortar mounted in the turret* (Soldier magazine).



Type B 1 × 75 mm cannon; **Type C** 1 × 105 mm cannon.

AMX 10 P tracked, air-portable APC: A 2 + 9 **B** 13.8 tons **C** 5.77; 2.78; 2.54 **D** 1 × 20 mm cannon **E** 1 × 7.62 mm coax MG **F** 280 hp, V-8, water-cooled, Hispano-Suiza, diesel **G** 20.3:1 **I** 65 km/h (40 mph) (7.9 km/h in water using hydrojet) **J** 600 km (373 miles) **L** amphibious.

Panhard AML 4 x 4 armoured cars (Model 61): These come in six versions with varying armaments on the same basic chassis. All have a three-man crew, are 3.79 m long, 1.97 m wide and 1.38 m high with a 90 hp engine and top speed of 100 km/h (62 mph). Range is 600 km (373 miles); fuel capacity 156 litres. Armour is 12 mm thick. Variations are as follows: **Type A: B** 4.8 tons **D** 1 × 60 mm mortar **E** 2 × 7.5 mm MGs; ammunition load — 53 mortar bombs, 3,800 rounds of MG ammunition. **Type B: B** 4.8 tons **D** 1 × 60 mm mortar **E** 1 × 12.7 mm MG; ammunition load — 41 mortar bombs, 1,200 rounds of MG ammunition. **Type C: B** 5.5 tons **D** 1 × 90 mm cannon **E** 1 × 7.5 mm MG; ammunition load 20 cannon shells, 2,000 rounds of MG ammunition. **Type D: B** 5 tons **D** 4 × ENTAC ATGWs; otherwise as for Type A. **Type E: B** 4.9 tons **D** 1 × 60 mm mortar **E** 1 × 20

mm cannon, 1 × 7.5 mm MG. **Type F: B** 5.5 tons **D** 1 × 30 mm cannon **E** 1 × 7.5 mm MG.

AMX 155 mm SP howitzer: A 1 + 9 **B** 17 tons **C** 6.5; 3.1; 2.8 **D** 1 × 155 mm howitzer **E** 1 × 7.62 mm MG **F** 250 hp **G** 14.4:1 **H** 20 mm **I** 60 km/h (37 mph) **J** 300 km (186 miles) **K** 450 litres **L** 0.65.

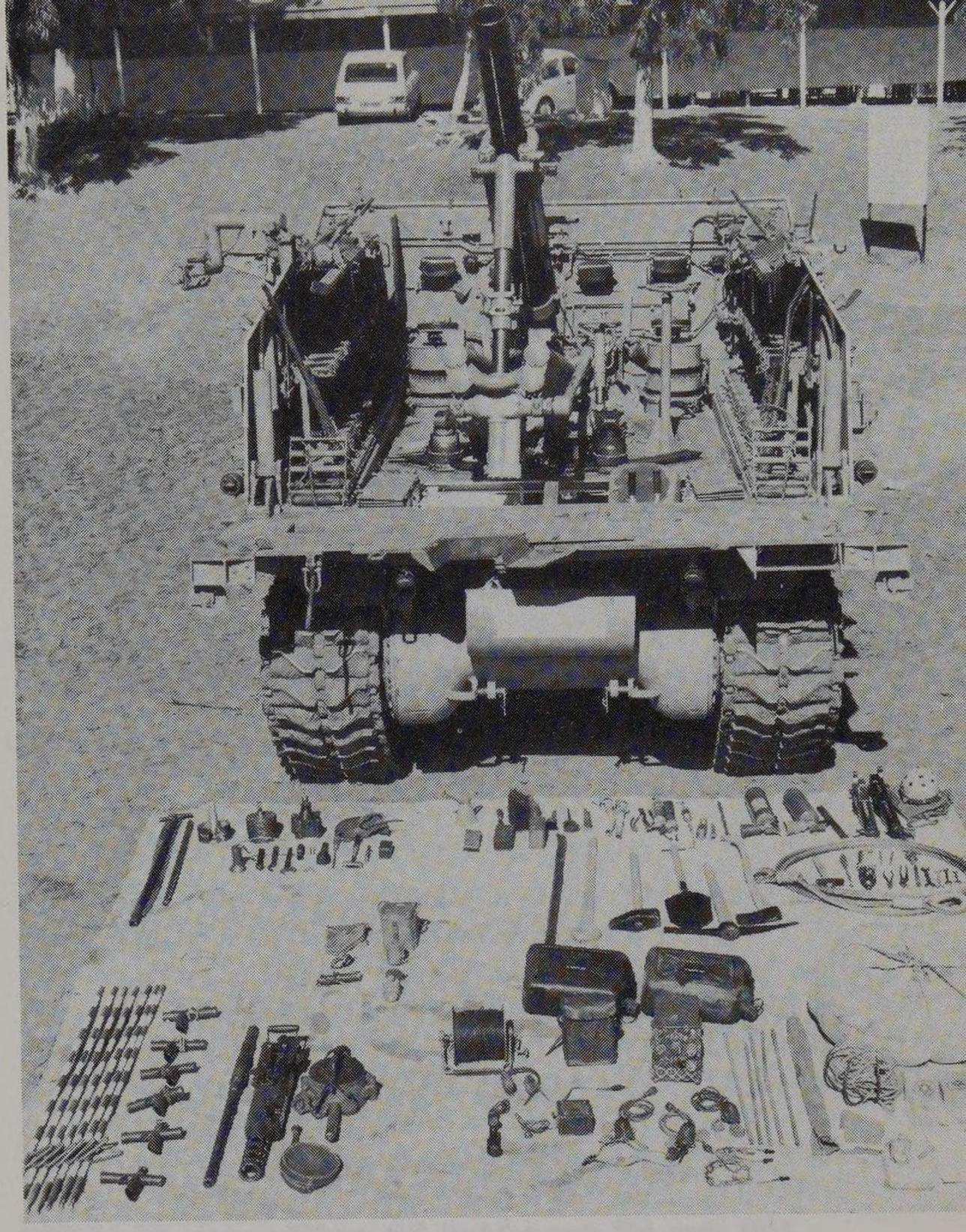
Israeli (including foreign vehicles modified in Israel)

M-4A3E8 (modified) Sherman: A 4 **B** 38 tons (approx) **C** 6.2 (hull); 3; 2.97 **D** British 105 mm; AP, APDS, HESH; not known **E** 1 × 7.62 mm coax, 1 × 12.7 mm AAMG **F** Cummins diesel, 460 hp, or Pratt & Whitney R-1340-AN-1, 500 hp ('Isherman') **G** 11.6:1 **H** 108 mm **I** 45 km/h (28 mph) **J** 240 km (150 miles) **K** 636 litres **L** nil **M** infra red.

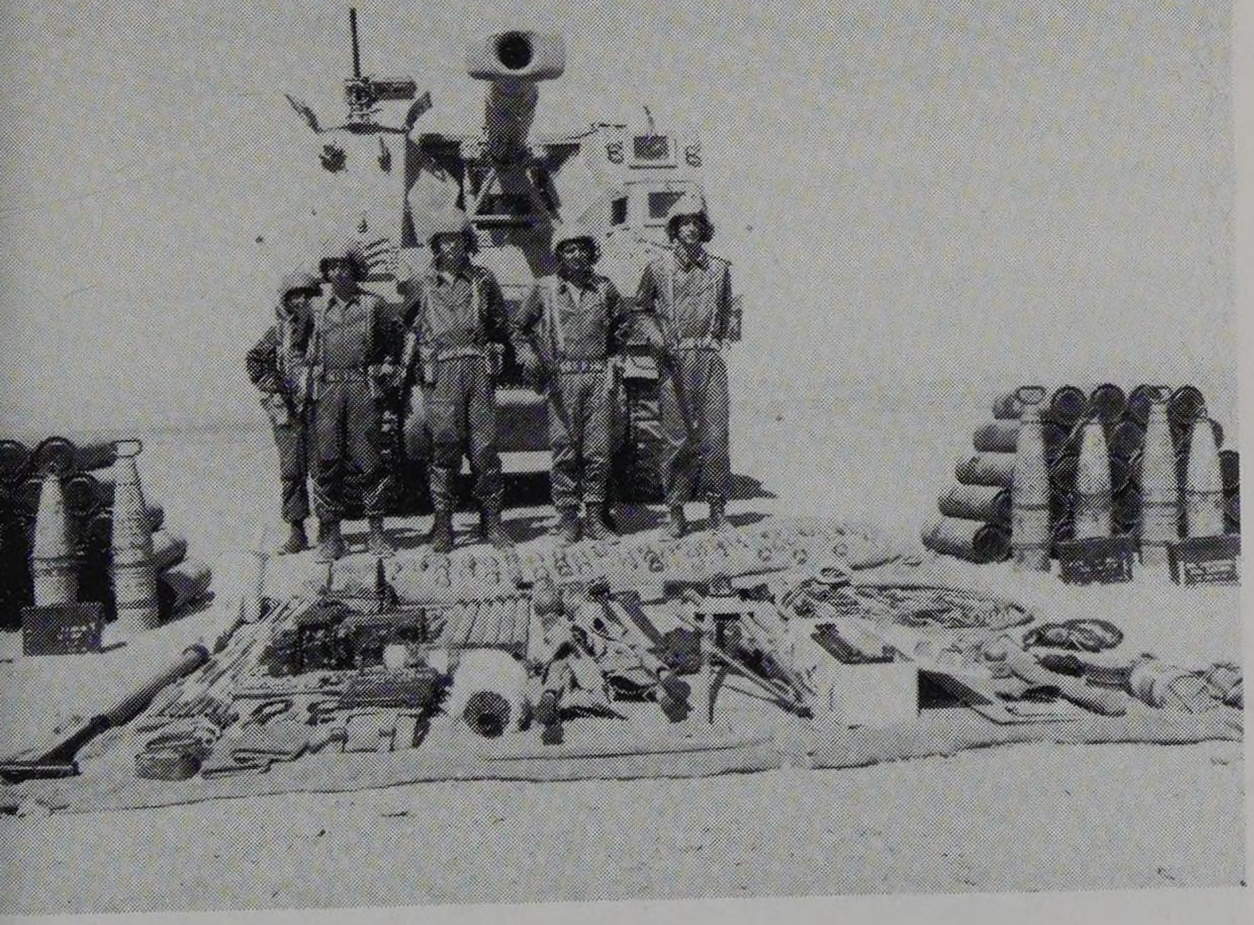
Centurion Mark 5 (modified): A 4 **B** 51.8 tons **C** 7.82; 3.4; 2.96 **D** British 105 mm cannon; AP, APDS, HESH; 70 rounds **E** 1 × 12.7 mm AAMG, 1 × 12.7 mm coax MG **F** Continental AVDS — 1790-2A/V-12 diesel, 750 hp **G** 14.5 hp/ton **H** 152 mm **I** 43 km/h (27 mph) **J** 400 km (250 miles) **K** 900 litres **L** 1.45; 2.95 **M** infra red.

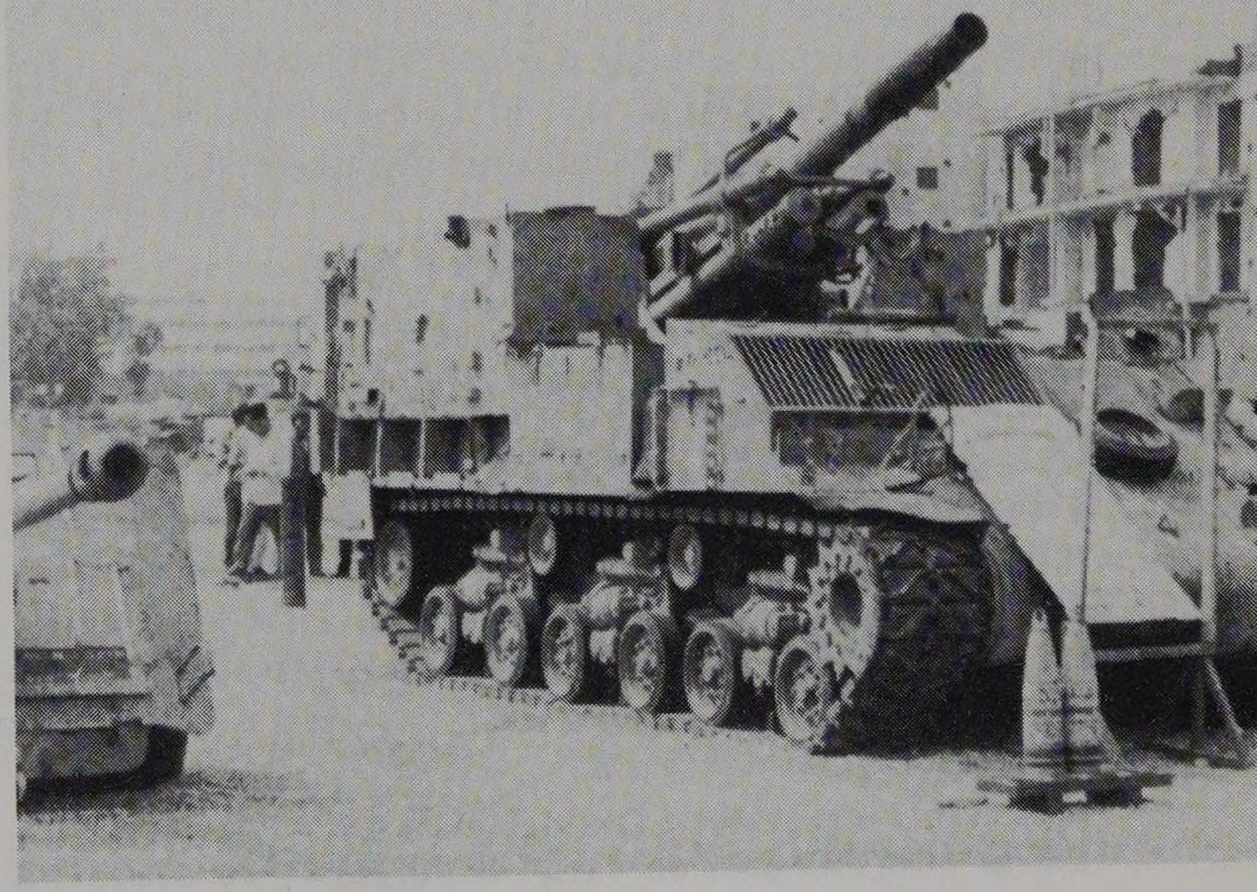
M-48A3 (modified): A 4 **B** 47.5 tons **C** 6.9; 3.63; 3.09 **D** British 105 mm cannon; AP, APDS, HESH; 62 rounds **E** 1 × 7.62 mm AAMG; 1 × 7.62 mm coax MG **F** Continental AVDS — 1790-2A/V-12 diesel, 750 hp **G** 15.9 hp/ton **H** 110 mm **I** 50 km/h (31 mph) **J** 460 km (287 miles) **K** 1,230 litres **L** 1.2 **M** infra red.

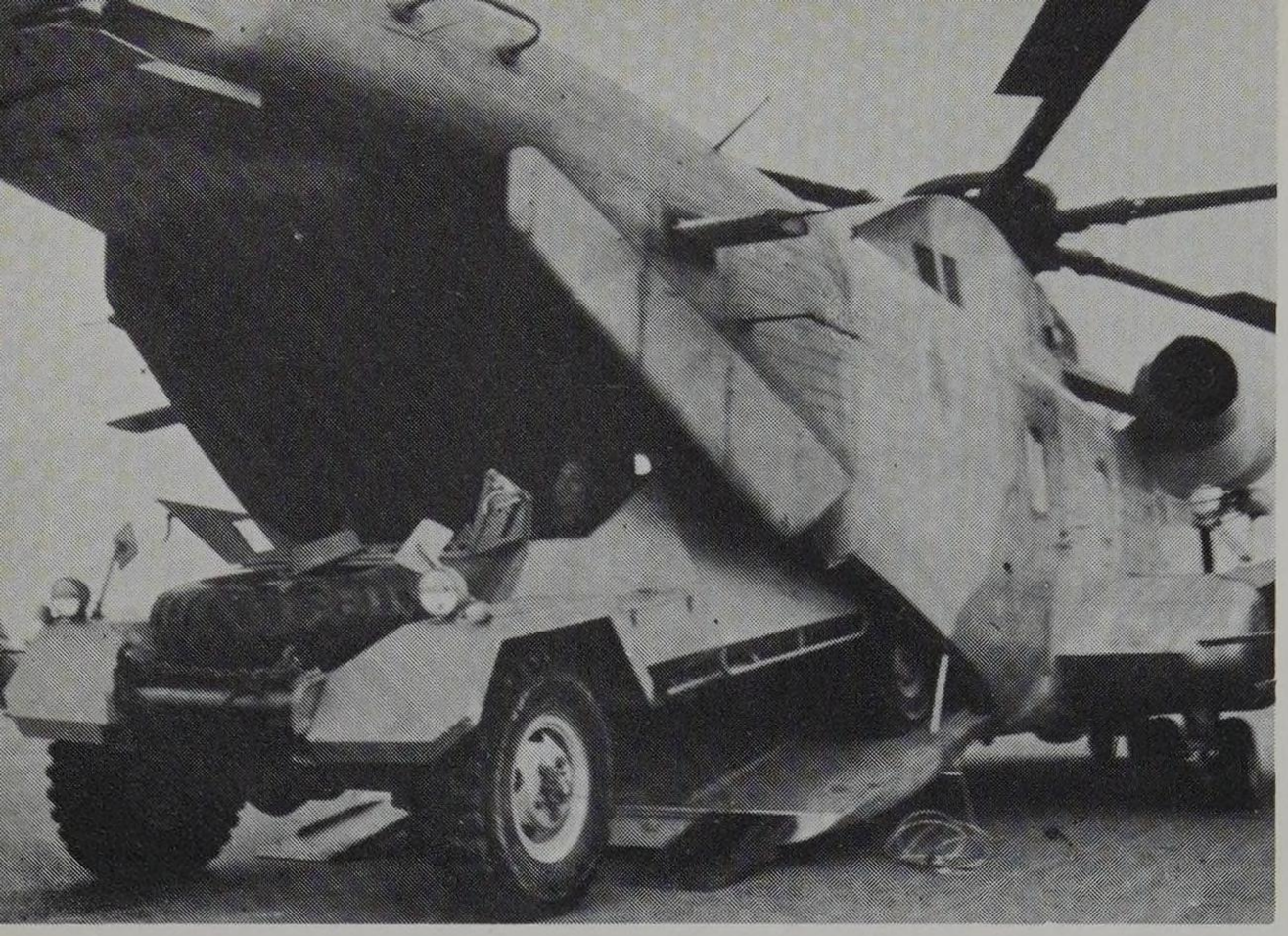
M-60A1 (modified): A 4 **B** 48.1 tons **C** 6.95; 3.63; 3.26 **D** British 105 mm cannon; AP, APDS, HESH; 63 rounds **E** 1 × 7.62 mm AAMG, 1 × 7.62 mm coax MG **F** Continental AVDS — 1790-2A/V-12 diesel, 750 hp **G** 15.7 hp/ton **H** 110 mm **I** 50 km/h (31 mph)

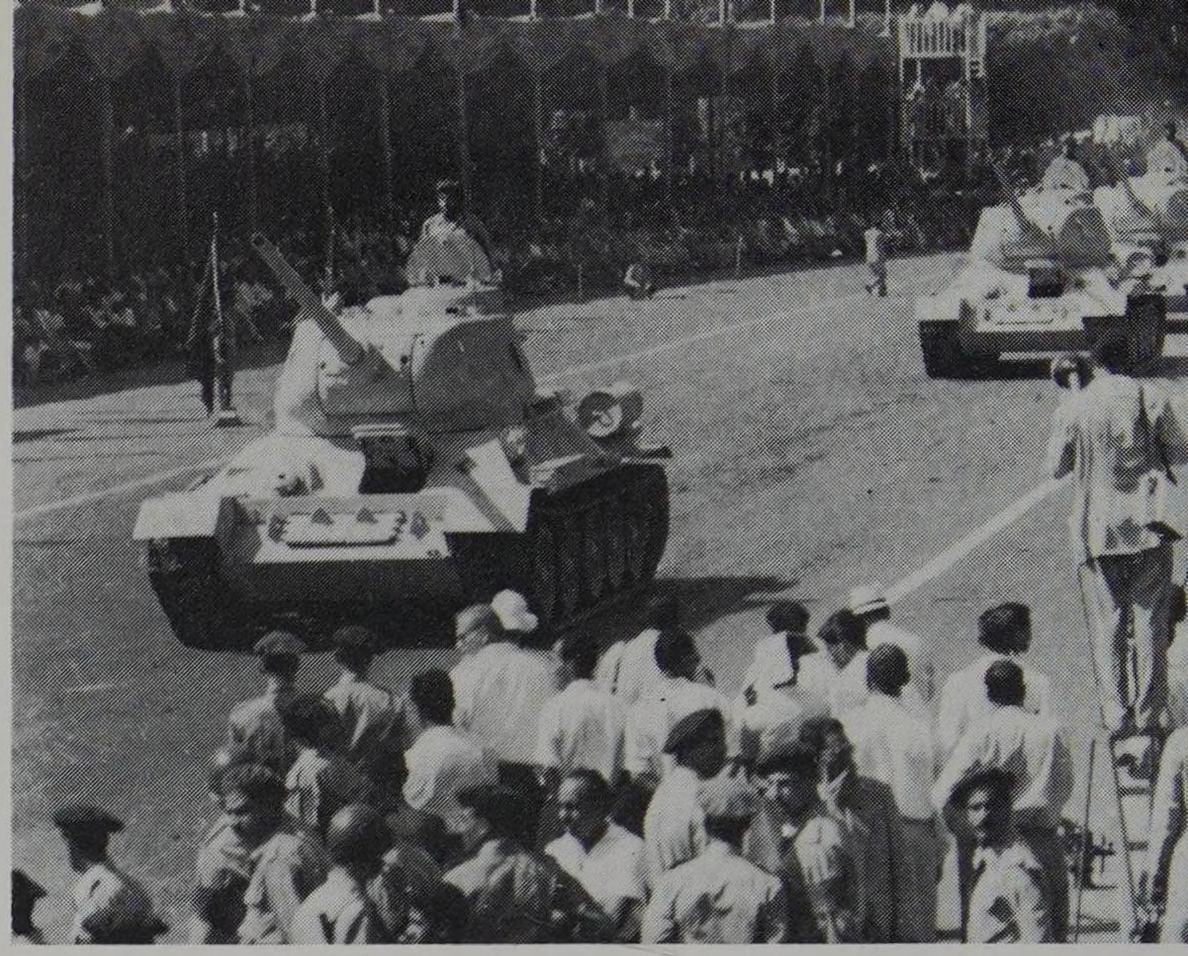


Above *Soltam heavy SP mortar undergoing a kit check* (Keren-Or). **Below** *An Israeli SP howitzer on a Super Sherman chassis captured in the Yom Kippur War and on display in Egypt* (Christopher F. Foss). **Below left** *Crew, ammunition and equipment of an Israeli SP howitzer. The crew helmets are of US origin* (Christopher F. Foss).









Left *An Israeli RBY reconnaissance vehicle leaving a helicopter. Note the folded-down front shield* (Christopher F. Foss). **Right** *Russian-built T-34s in Cairo during the late 1950s* (AP).

J 520 km (325 miles) **K** 1,120 litres **L** 1.2 **M** infra red.

L-33 155 mm SP howitzer (French artillery piece on Super Sherman M-4A3E8 (modified) chassis): A 8 **B** 40.8 tons **C** (including gun) 8.55 m (hull only 6.4 m); 3.33 m; 2.46 m **D** 155 mm cannon with range 21.5 km (13.4 miles), HE, smoke; 30 rounds **E** 1 × 7.62 mm AAMG **F** Cummins diesel **G** not known **H** 64 mm **I** 37 km/h (23 mph) **J** 260 km (162 miles) **K** 636 litres **L** 0.9 **M** none.

160 mm SP mortar on Super Sherman M-4A3E8 (modified) chassis: A 7 **B** 36 tons **C** 6.4 m; 3.33 m; 2.46 m **D** 160 mm mortar, range 9.6 km (6 miles), HE, smoke, illumination; 56 rounds, rate of fire 5 rpm **E-M** as for L-33 SP howitzer.

RBY Mark 1 4 × 4 reconnaissance vehicle: Israeli Military Industries **A** commander, driver + 6 **B** 3.54 tons **C** 5.02 m; 2.03 m; 1.66 m (wheelbase 3.4 m, track 1.67 m) **D** 2 × 7.62 mm MG **E** nil **F** Dodge M225.2, 6-cylinder, water-cooled, 120 hp **G** 33.9 hp/ton **H** 10 mm (on floor) otherwise 8 mm **I** 100 km/h (62 mph) **J** 550 km (344 miles) **K** 140 litres **L** not known **M** not known. The wings and bonnet are glass fibre.

Russian

T-34/-85 battle tank: A 4 **B** 32 tons **C** 6.1; 3.0; 2.7 **D** 85 mm cannon; HE, AP, HEAT; 56 rounds **E** 1 × 7.62 mm coax MG, 1 × 7.62 mm hull MG **F** 500 hp diesel **G** 15.6 hp/ton **H** turret 150 mm, hull 45 mm **I** 55 km/h (33 mph) **J** 300 km (187 miles); or 500 km (300 miles) with supplementary tanks **K** 550 litres + 360 litres in supplementary tanks **L** 1.3. This equipment saw much service during World War 2. Variants such as bridgelayers and recovery tanks are also in use.

PT-76 amphibious tank: A 3 **B** 15 tons **C** 6.9; 3.1; 2.2 **D** 76 mm cannon; HE, AP, HEAT; 40 rounds **E** 1 × 12.7 mm AAMG, 1 × 7.62 mm coax MG **F** 240 hp diesel **G** 16 hp/ton **H** turret 16 mm, hull 14 mm **I** 40 km/h (25 mph) **J** 250 km (155 miles) **K** 250 litres **L** inherently amphibious **M** infra red driving and gun sighting equipment. Introduced shortly after World War 2, this light reconnaissance tank has appeared in all Warsaw Pact armies as well as in the Middle East and Far East. Water propulsion is achieved by hydro-jet equipment through two apertures in the rear hull, giving a water speed of 10 km/h (6 mph).

T-54 battle tank: A 4 **B** 36 tons **C** 6.0; 3.25; 2.4 **D** 100 mm cannon; HE, AP, HEAT; 34 rounds **E** 1 × 12.7 mm AAMG, 2 × 7.62 mm coax and hull MGs **F** 520 hp diesel **G** 14.4 hp/ton **H** turret 300 mm, hull front 100 mm, hull side 45 mm **I** 50 km/h (30 mph) **J** 600 km (373 miles), with supplementary tanks **K** 800 litres, 1,200 litres with supplementary tanks **L** 1.4; 2.4; 5.0 with extra equipment **M** infra red driving and gun sighting equipment. This simple, robust tank has been converted to the T-55 by means of minor modifications such as stabilisation of the main armament and a more powerful engine. Introduced into service not long after the close of World War 2, it is a direct development of the famous T-34; like this whole family of tanks, it uses the Christie suspension system. T-54s, T-55s and T-62s captured by the Israelis have been modified to take the standard British Vickers 105 mm gun.

T-55 battle tank: A 4 **B** 36 tons **C** 6.0; 3.28; 2.4 **D** 100 mm cannon; HE, AP, HEAT; 43 rounds **E** 1 × 7.62 mm coax MG, 1 × 7.62 mm AAMG **F** 580 hp diesel **G** 16.1 hp/ton **H** as for T-54 **I** as for T-54 **J** as for T-54 **K** as for T-54 **L** as for T-54 **M** as for T-54. The basic difference between T-54 and T-55 is the more powerful engine, and the fact that T-55's main armament is stabilised horizontally and vertically. As

with all Soviet equipment, crew comfort comes low on the list of priorities. T-55 did not do well in the 1967 Arab-Israeli war when pitted against the British Centurion.

T-62 battle tank: A 4 **B** 36 tons **C** 6.5; 3.25; 2.2 **D** 115 mm smooth-bore cannon; HE, APDS, HEAT; 40 rounds **E** 2 × 7.62 mm coax and AA MGs **F** 580 hp diesel **G** 16.1 hp/ton **H** as for T-54 **I** 50 km/h (30 mph) **J** as for T-54 **K** as for T-54 **L** as for T-54 **M** as for T-54. The latest Soviet tank in general use; although only seen in very limited numbers in non-Warsaw Pact countries, about 100 tanks were used by both Egypt and Syria in the 1973 war with Israel. Largely due to the shorter engagement range and the inferior sighting equipment, the T-62 does not seem to have distinguished itself against the elderly Israeli Centurion.

BMP-1 MICV: A 11 (driver, gunner, commander and 8 infantry) **B** 12.29 tons **C** 7.65; 3; 2 **D** 1 × 73 mm smoothbore firing APDSFS range over 1 km, 8 rpm (30 rounds), 5 × Sagger ATGWs (range over 3 km) **E** 1 × 7.62 mm coax MG **F** 6-cylinder, water-cooled, diesel 280 hp **G** 22.78 hp/ton **H** 14 mm **I** 55 km/h (34 mph) (8 km/h in water) **J** 300 km (186 miles) **K** 300 litres **L** amphibious. This agile vehicle has a magnesium alloy hull and thus burns well. Its armour protection is negligible but its cannon and ATGWs make it a definite threat to enemy tanks.

BTR-40 4 × 4: A 2 + 8 **B** 5.22 tons **C** 5; 1.9; 1.75 **D** 1 × 7.62 mm MG, 1,250 rounds **E** nil **F** GAZ-40, 6-cylinder, water-cooled, 80 hp **G** 15.3 hp/ton **H** 8 mm **I** 80 km/h (49.7 mph) **J** 285 km (177 miles) **K** 120 litres **L** 0.9 m **M** nil.

BRDM-2 4 × 4: A 4 **B** 6.89 tons **C** 5.75; 2.39; 2.31 **D** 3 × Sagger ATGWs **E** nil **F** GAZ-41 V8 water-cooled, 140 hp **G** 20.3 hp/ton **H** 11 mm **I** 100 km/h (62 mph) (10 km/h in water) **J** 750 km (466 miles) **K** 290 litres **L** amphibious **M** infra red.

BTR-40 P 4 × 4: A 5 **B** 5.514 tons **C** 5.7; 2.25; 1.9 **D** 1 × 7.62 mm MG or 1 × 12.7 mm DShk MG or 6 × Sagger ATGWs **E** nil **F** GAZ-40 P, 6-cylinder, water-cooled, 90 hp **G** 16.32 hp/ton **H** 10 mm **I** 80 km/h (49.7 mph) (9 km/h in water) **J** 500 km (310 miles) **K** 150 litres **L** amphibious **M** infra red.

BTR-152 6 × 6: A 2 + 17 **B** 8.81 tons **C** 6.83; 2.32; 2.05 **D** 1 × 7.62 mm MG, 1,250 rounds **E** nil **F** ZIL-123, 6-cylinder, water-cooled, 110 hp **G** 12.48 hp/ton **H** 10 mm **I** 75 km/h (47 mph) **J** 650 km (404 miles) **K** 300 litres **L** 0.8 m **M** nil.

BTR-50 (tracked): A 2 + 20 **B** 14 tons **C** 7.08; 3.14; 1.97 **D** 1 × 7.62 mm MG, 1,250 rounds **E** nil **F** GAZ V6, water-cooled, diesel, 240 hp **G** 17.14 hp/ton **H** 11 mm **I** 44 km/h (27 mph) (11 km/h in water) **J** 260 km (161 miles) **K** 250 litres **L** amphibious **M** infra red.

BTR-60 PK 8 × 8 (open-topped): A 2 + 16 **B** 9.82 tons **C** 7.56; 2.82; 2.06 **D** 1 × 7.62 mm MG, 1,250 rounds **E** nil **F** 2 × GAZ-49B, 6-cylinder, water-cooled engines each with 90 hp **G** 18.32 hp/ton **H** 10 mm **I** 80 km/h (49 mph) (10 km/h in water) **J** 500 km (310 miles) **K** 290 litres **L** amphibious **M** infra red.

BTR-60 PB 8 × 8 (with turret): Data as for BTR-60 PK except: **A** 2 + 14 **B** 10.1 tons **C** height 2.31 **D** 1 × 14.5 mm KPVT MMG **E** 1 × 7.62 mm MG **G** 17.82 hp/ton **H** turret 14 mm.

An M-16 US .223-inch carbine with 40 mm grenade launcher mounted under the barrel (Soldier magazine).



Small arms, artillery, missiles and other equipment

Key
Z1 Calibre
Y2 Length in cm
X3 Weight in kg
W4 Range in metres
V5 Velocity in metres/sec
U6 Operation principle
T7 Magazine and rate of fire
S8 Remarks

Note The muzzle velocities quoted relate to the ammunition used.

American-produced weapons

Colt M1911A1: Z1 .45 inch **Y2** 21.8 (barrel 12.7) **X3** 1.1 **W4** 50 **V5** 250 **U6** recoil **T7** 7-round magazine in **butt S8** in service with the Iranian forces.

Ingram MAC11 SMG: Z1 9 mm short **Y2** 46 (22.2 stock folded; barrel 12.9) **X3** 1.6 **W4** 50 **V5** not known **U6** blowback **T7** 16- or 32-round box magazine **S8** in service with Saudi Arabian special forces.

Lance: This replacement for Honest John is nor-



A US-produced Lance SSM. This equipment is also being considered for introduction into various Middle East Armies (Christopher F. Foss).

mally carried in a tracked, amphibious vehicle — a derivative of the M-113 APC called the XM-667 — and can be fired from the same vehicle. The missile weighs about 1,400 kg and has a minimum range of 5 km and a maximum range of 70 km. The warhead can be conventional or nuclear. Air portable weapons systems are transported and fired from a wheeled carrier.

Czechoslovakian-produced weapons

Due to their similarity to Russian weapons these items are often wrongly identified as being of Russian origin.

M50 machine-pistol: Z1 7.62 mm **Y2** not known **X3** 4 **W4** 100 **V5** not known **U6** blowback **T7** 32 rounds (fires at 600 rpm) **S8** similar in appearance to the Sten gun; this weapon has a wooden butt.

M24/26 machine-pistol: Z1 7.62 mm **Y2** not known **X3** 3.9 (loaded) **W4** 100 **V5** not known **U6** blowback **T7** 32 rounds (fires at 600 rpm) **S8** a weapon which looks remarkably like the M50.

M23/25 SMG: Z1 9 mm Parabellum **Y2** not known **X3** 3.1 (loaded) **W4** 200 **V5** 380 **U6** blowback **T7** 24- or 40-round box (single shot or burst, 600 rpm) **S8** in service with Syrian forces.

M52/57 self-loading carbine: Z1 7.62 mm **Y2** not known **X3** 4.35 (loaded and with bayonet) **W4** 400 **V5** not known **U6** gas assisted T7 10-round magazine.

M58 machine carbine: This weapon is the same as the Russian AK-47 except: **X3** 4 (loaded) **T7** fires at 700-800 rpm.

M1952/57 light machine-gun: Z1 7.62 mm **Y2** not known **X3** 8 (unloaded) **W4** 800 **V5** not known **U6** gas assisted **T7** 25 rounds or belts of 100 rounds (fires at 1,100 rpm) **S8** this weapon is equipped with a bipod or with a tripod chassis.

Kulomet ZB-60 HMG: Z1 15 mm **Y2** 205 (barrel 109) **X3** 159 (with tripod) **W4** 2,400 **V5** 905 **U6** gas operated **T7** 40-round belt (fires at 430 rpm).

P27 'Pančerovka' light anti-tank rocket projector: Missile warhead calibre 112 mm; warhead nature — hollow charge; weight of loaded projector — 10.15 kg; effective range — 105 m; armour piercing capability — 230 mm.

T-21 'Tarasnice' recoilless anti-tank gun: Z1 82 mm **Y2** not known **X3** 392 (loaded) **W4** 1,100 **V5** 745; warhead nature — hollow charge; armour piercing

capability — 250 mm; **T7** fires at 4 rpm **S8** this is a towed weapon developed by the Skoda firm, as were the P27 and the T21.

Egyptian-produced weapons

Hakim 7.62 mm semi-automatic rifle: Z1 7.62 mm **Y2** 121.4 (barrel 62.2) **X3** 4.7 **W4** 500 **V5** 746 **U6** gas operated, semi-automatic **T7** 10-round magazine **S8** a production under licence of the Swedish Carl Gustav AG42 weapon.

Rashid 7.62 mm semi-automatic rifle: Z1 7.62 mm **Y2** 101.6 **X3** 3.9 **W4** 450 **V5** 746 **U6** gas operated, semi-automatic **T7** 10-round magazine **S8** developed from the Hakim and the Soviet Simonov (SKS) weapons.

Israeli-produced weapons

The Uzi sub-machine gun: Z1 9 mm **Y2** not known **X3** 3.5 **W4** 200 **V5** 390 **U6** blowback **T7** 25-, 32- or 40-round magazine (fires at 600 rpm) **S8** designed in the late 1940s by Uziel Galil, this weapon has proved so effective and reliable that it is manufactured under licence by F. N. Herstal in Belgium and is in service with the Dutch, Belgian, West German and other armies.

Galil ARM rifle: Z1 5.56 mm **Y2** 97 (barrel 46) **X3** 3.9 **W4** 600 **V5** 980 **U6** gas operated **T7** 35- or 50-round magazine (fires at 650 rpm) **S8** designed by IMI, the automatic rifle and LMG is based on the Kalashnikov with the same rotating bolt locking system. The bipod legs also serve as a wire cutter, the cocking handle is mounted on top and the change lever can be operated from both sides of the weapon. The stock is collapsible. This gun has been in service with the IDF since 1974.

Galil SAR (short assault rifle): Details as for the Galil ARM except: **Y2** 84.5 (barrel 33) **X3** 3.5 **W4** 400 **V5** 920.

IMI 52 mm mortar: Z1 52 mm **Y2** barrel 49 **X3** 7.9 **W4** 130-420 **S8** this mortar fires 20-35 rpm; HE, smoke, illumination rounds. It is fired by turning a handle at the base.

Tampella light 60 mm mortar: Z1 60.75 mm **Y2** barrel 74 **X3** barrel 6.6 with sight, bipod 4.5, baseplate 3.4 **W4** 2,550 **S8** this mortar fires HE (1.5 kg), smoke and phosphor.

Tampella 81 mm mortar with split barrel: Z1 81 mm **Y2** barrel (short) 115.5 (long) 145.5 (split) 145.5 **X3** barrel (short) 11.6 (long) 14.5 (split) 17.5, bipod 12.3, baseplate 13.2; weight in firing position, (short) 37 (long) 40 (split) 43 **W4** (short) 4 (long and split) 4.6 **T7** this mortar fires 20 rpm of HE, smoke and illumination rounds.

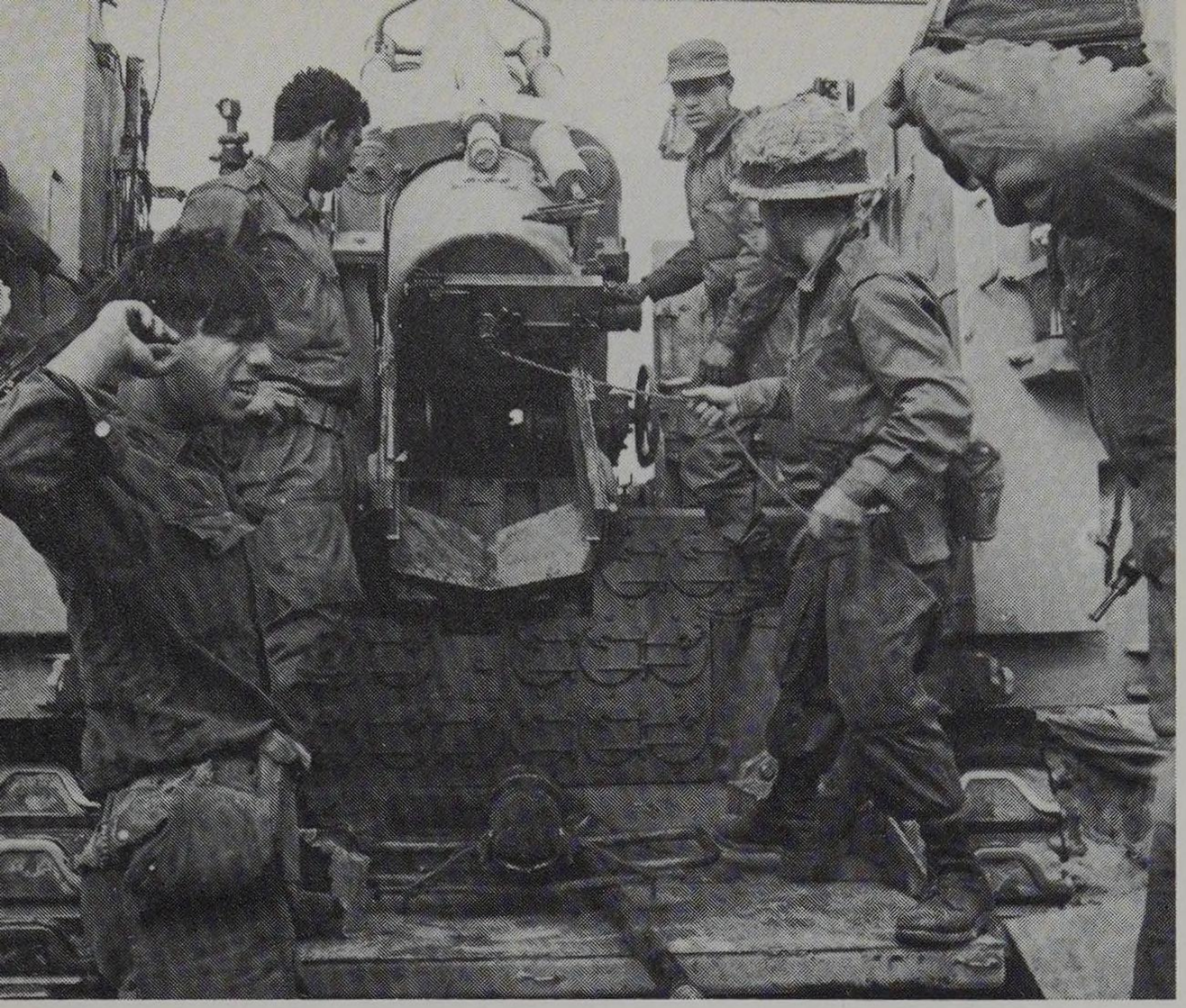
Tampella 120 mm light mortar: Z1 120 mm **Y2** barrel 173 **X3** 47, bipod 27, baseplate 38 **W4** 7,000.





Top *Israeli Uzi SMG with its stock extended* (Christopher F. Foss). **Above** *An Israeli 5.56 mm short-barrelled Galil SAR assault rifle with its stock extended. The similarity to the Kalashnikov design is marked* (Israeli Military Industries). **Below** *Israeli-produced twin 20 mm AA guns mounted in the ubiquitous half-track (*Christopher F. Foss).





A 105 mm SP howitzer in action in Sinai. Note the Uzi SMG with wooden butt (AP).

This mortar fires 5-10 rpm of HE (12.9 kg), smoke or illumination rounds. It has a two-wheeled carriage of 110 kg.

Tampella 120 mm standard mortar: Z1 120 mm **Y2** barrel 194 **X3** 82, bipod 66, baseplate 72, carriage 129 **W4** 8,300 **S8** this mortar fires 5-10 rpm of HE (12.9 kg), smoke or illumination rounds.

Italian-produced weapons

9 mm M1951 Beretta pistol: Z1 9 mm **Y2** not known **X3** 0.71 **W4** 50 **T7** 8-round magazine.

9 mm M38/49 Beretta SMG: Z1 9 mm **Y2** 64.5 **X3** 3.3 **W4** 100 **V5** not known **U6** blowback **T7** 20- or 40-round straight magazine below the breech (fires at 550 rpm) **S8** wooden butt.

7.62 mm self-loading carbine BM59/Mk Ital (Fucile automatico leggero): **Z1** 7.62 mm **Y2** 109 **X3** 4.22 **W4** 500 **V5** not known **U6** gas-assisted **T7** 20-round magazine (fires at 750 rpm) **S8** this is an Italian development of the American Garand M-1 carbine; another version, the BM59/Mk Ital-A has a pistol grip and collapsible metal butt.

Russian-produced weapons and equipment

Mortars

M-37: 83 mm mortar. Weight — 56 kg; muzzle velocity — 211 m/sec; range — 0.1 to 3.04 km; Rate of fire — 25 rpm; ammunition type — HE and smoke (3.35 kg).

M-43: 120 mm mortar. Weight — 275 kg at the firing point, 500 kg when being towed; range — 0.46 to 5.7 km; muzzle velocity — 272 m/sec; rate of fire — 15 rpm; ammunition type — HE, smoke and incendiary (15.8 kg). This and the M-37 are used at battalion and regimental level.

M-53: 160 mm mortar. Weight at firing point — 1,443 kg (1,670 when being towed); range — 0.75 to 8.1 km; rate of fire — 2-3 rpm; ammunition type — HE (40.8 kg). This weapon is rear-loaded and exists at regimental and divisional level. Velocity — 340 m/sec.

240 mm M-53 Mortar: Although now no longer seen in Soviet units of the Category 'I' class, this weapon is still in use in Category 'II' and 'III' units and in the artillery of the other Warsaw Pact units. It is rear loading and is a divisional level weapon. Range — 9.7 km; rate of fire — 1 rpm; weight of round — 130 kg; weight of weapon — 4,150 kg; Velocity — 360 m/sec.

Anti-tank Weapons

RPG-7 (Reaktivnij Protivotankovyi Granatomet): or recoilless grenade launcher. Grenade calibre — 100 mm; weight — 2.5 kg; effective range — 300 m; armour penetration — 300 mm; rate of fire — 4 rpm. This is the section anti-tank weapon of the motor rifle battalion and fires a hollow charge projectile. **B-10** (Bezotkatnoje Orudie) Recoilless anti-tank gun. Calibre — 82 mm; weight of weapon in fire position — 91 kg; effective ranges: HE — 4,500 m; hollow charge — 500 m; rate of fire — 6 rpm. This equipment has largely been replaced (except in airborne regiments) by anti-tank guided weapons (ATGW). It was deployed at a scale of 54 per motor rifle division (one platoon per motor rifle battalion). **107 mm Recoilless Gun** Weight in firing position (complete with wheeled transport dolly) — 225 kg; range (hollow charge) — 1,000 m. There are six of these weapons in the anti-tank company of a motor rifle regiment.

Soviet multiple ballistic rocket launchers

Multiple rocket launchers have fascinated the Soviets since before World War 2 and their armoury of these weapons is large and varied. Essentially an area weapon, a multiple rocket launcher is perhaps more impressive when one sees it actually in the act of firing a salvo than when one watches the salvo exploding on, or about, the target.

Key

A1 Calibre in cm
B2 Number of barrels
G3 Range in km
D4 Weight of rocket in kg
E5 Vehicle on which mounted
F6 Year into service
G7 Level employed

BM14: Four variants — (a) **A1** 14 **B2** 8 **C3** 9 (5.6

miles **D4** 41 **E5** GAZ-63 **F6** 1963* **G7** Divisional; (b) **A1** 14 **B2** 16 **C3** 9 (5.6 miles) **D4** 41 **E5** Towed (GAZ-69A) **F6** 1964 **G7** Airborne battalions; (c) **A1** 14 **B2** 17 **C3** 9 (5.6 miles) **D4** 41 **E5** towed (GAZ-69) **F6** 1959 **G7** Airborne battalions; **(d) A1** 14 **B2** 16 **C3** 9 (5.6 miles) **D4** 41 **E5** SIL-151 **F6** 1954* **G7** Divisional.

BMD20: A1 20 **B2** 4 **C3** 18 (11 miles) **D4** 194 **E5** SIL-151 **F6** 1954 **G7** Divisional.

BM21: A1 11.5 **B2** 40 **C3** 15 (9 miles) **D4** 60 **E5** URAL-375 **F6** 1964 **G7** Divisional.

BM24: Two variants — (a) **A1** 24 **B2** 12 **C3** 7 (4 miles) **D4** 113 **E5** SIL-151 **F6** 1953* **G7** Divisional; (b) **A1** 24 **B2** 12 **C3** 7 (4 miles) **D4** 113 **E5** AT-S **F6** 1957* **G7** Divisional.

BMD25: A1 25 **B2** 6 **C3** 20 (12 miles) **D4** 450 **E5** JAAS-214 **F6** 1957 **G7** Army.

BM28: A1 28 **B2** 6 **C3** 30 (19 miles) **D4** 455 **E5** KRAZ-214 **F6** 1957 **G7** Army.

*Obsolescent — being replaced by BM21.

SPG-9 Rocket Launcher: Calibre of projectile — 76 mm; weight, range and rate of fire not known.

M-43, 57 mm Anti-tank gun (ATG): Weight of projectile (high explosive squash head HESH) — 3.14 kg; weight of kinetic energy projectile (KE) not known; range — 8.5 km; rate of fire — 25 rpm. Employment — one platoon (3 guns) in each motor rifle battalion.

M-55 57 mm Anti-tank gun: Weight of HESH projectile — 3.14 kg; weight of KE projectile — ?; range — 8.5 km; rate of fire — 25 rpm. This weapon has a 20 hp auxiliary motor fitted to give it increased battlefield mobility; unlike the M-43, the M-55 has a muzzle brake. It is employed as for the M-43 and is replacing that weapon.

M-45 85 mm Anti-tank gun: Weight of HESH projectile — 9.2 kg; weight of KE projectile — ?; range — 16 km; rate of fire — 20 rpm; weight of weapon with auxiliary power unit (22 hp, giving a speed on roads of 27 km/h) — 2,300 kg; weight of weapon in firing position — 1,704 kg. This weapon is parachuted into action with airborne troops and is equipped with an infra red searchlight. There are six such weapons in the anti-tank company of a motor rifle regiment and 18 in the artillery of a motor rifle division.

M-55 100 mm Anti-tank gun: Weight of HESH projectile — 15.7 kg; weight of fin-stabilised KE projectile — ?; range — 21 km; rate of fire — 10 rpm; weight of weapon with auxiliary power unit — 3,455 kg; weight of weapon in firing position — 2,700 kg; employment as for M-45, 85 mm ATG.

ASU-57 (Aviadesantnaja Samochodnaja Ustanovka): Air portable, self-propelled ATG. Introduced into service in 1957, the chassis is a variant on the AT-P Artillery tractor theme. The gun is the M-55, 57 mm ATG. Vehicle weight — 5.5 tons; crew — 3; engine — 100 hp; speeds (roads) — 55 km/h; range — 320 km; hull length — 3.72 m; height — 1.7 m; width — 2.1 m. There is no overhead cover for the crew; the armour is up to 12 mm thick.

ASU-85: This air portable, self-propelled ATG carries an 85 mm weapon with muzzle brake and fume extractor. The chassis is based on the PT-76 tank and there is overhead cover for the 4-man crew. It was introduced into service in 1962. Weight — 16 tons; hull length — 7 m; height — 2.3 m; width — 3.16 m; engine — 240 hp diesel; maximum road speed — 45 km/h. This equipment is used in the tank-hunter battalions of the airborne divisions. Its armour is up to 40 mm thick in front and it is almost certainly not capable of being dropped by parachute.

Anti-Tank Guided Weapons (ATGW)

Schmel (Humming Bee): The NATO code name for this weapon is Snapper. It is mounted on the GAZ-69A Jeep or the BRDM scout car (three per vehicle) and can be fired either from the vehicle or from a remote position. It is widely used in other Warsaw Pact armies. The warhead is 14 cm in diameter, hollow charge, the rocket weighs 22.3 kg, it is optically wire guided and the range extends from 500-2,000 m; speed — 100 m/sec.

Swatter: The Russian name for this weapon is unknown. Calibre — 13 cm; weight — 27 kg; hollow charge warhead; radio guided; range — 400-2,500 m. This weapon is mounted on the BRDM scout car (four per vehicle); a Swatter B exists and has an increased range. Swatter may also be fired remote from its parent vehicle. Speed — 230 m/sec.

Sagger: This is the NATO codeword for this Soviet ATGW. Calibre — 12 cm; weight — 13 kg; guidance — optical/infra red and wire; range — 500-3,000 m; hollow charge warhead. Six such missiles are usually mounted on BRDM scout cars in the motor rifle regiment's ATGW battery or in the motor rifle division's AT battalion. Speed — 200 m/sec. Sagger is man-portable and a team consists of vehicle, 3 crew and 4 missiles. The warhead is carried in a glass-fibre container with the motor as a one-man load but warhead and motor are only married up at the firing point when the warhead is clipped on to the motor unit.

Field guns

M-63 122 mm gun howitzer: This weapon folds its barrel over its trails for towing purposes and when in the firing position, the trails (three) are spread each at 120° to the other; the road wheels are raised and the gun then has 360° of traverse. In 1967 the Egyptian army was equipped with these guns. They are now the standard divisional towed artillery piece, the prime mover being either the URAL-375 or the JAAS-214 lorry. Weight of weapon at the firing point

— 5,000 kg; range — 18 km; rate of fire — 6 rpm.

M-55 122 mm gun: Modern piece; the gun's wheels can be driven from the prime-mover by means of a flexible drive cable. The prime-mover is either the AT-L tracked tractor or a lorry (JAAS-214). The recuperator mechanism is concentrically mounted around the barrel and there is a muzzle brake. Weight in firing position — 5,000 kg; weight of projectile — 25.5 kg; range — 21 km; rate of fire — 5 rpm; ammunition types — HE, smoke, incendiary and HESH.

M-55 152 mm gun howitzer: This is the sister weapon to the M-55 122 mm gun and enjoys the same chassis and recuperator, the 152 mm barrel is shorter than that of the 122 mm gun. Weight in firing position — 5,900 kg; weight of projectile — 48 kg; range — 18 km; rate of fire — 4 rpm; ammunition natures — as for M-55 122 mm gun. Lateral traverse is limited to ±30°.

These weapons are very versatile and are capable of laying anti-tank minefields at threatened spots in a remarkably short time, using rockets which include dozens of bar-shaped anti-tank mines which are scattered over the target area and automatically armed as they land. They can also fire high explosive rockets, smoke and chemical rockets. Vehicle mounted versions include the BM-13 (BM = Bolewajamaschina) of 1941 vintage (mounted on the SIL-151 or GAZ-63 trucks); the BM-14, 16-barrelled version on the SIL-151; the BM-20 (four rockets per salvo on a SIL-151 truck); the BM-21 (also known as the M64), 122 mm, 40-tube rocket launcher on SIL-151 truck; the 12-barrelled 24 mm launcher on the AT-S tracked carrier; the towed, 16-barrelled, 140 mm M-1965; and the 8-barrelled WP-8Z towed weapon of the Polish airborne forces. The Czechs have come up with an improved version of the BM-21 mounted on their Praga 6 × 6 trucks whereby the launcher carries a second loading on the same vehicle so that the vehicle can fire two salvoes rapidly from the same launching site (before moving off to avoid the inevitable enemy counter bombardment) instead of only one salvo. The disadvantages of these weapons are that they use large quantities of ammunition within short periods and that they require a long re-load time (15 minutes in the case of the non-Czech BM21).

Rocket artillery includes tactical rockets of the Frog (Free Flight Rocket Over Ground) range and operational-tactical missiles of the Scud (Surface to Surface Guided Missile) Group. At divisional level there are Frog 3 (range 40 km) on a tracked chassis based on the PT-76 model; the Frog 4 (range 50 km) on the same tracked chassis; Frog 5 (range 50 km) on PT-76 chassis; and the new Frog 7 (range 50 km) on the 8-wheeled, ZIL-135 carrier. These missiles are solid fuel rockets which makes for easier storage and quicker firing procedures than their big brothers, the liquid fuelled Scud missiles.

At army level the Scud A (range 150 km) and Scud B (range 165 km) are to be seen in their older versions on the adapted Josef Stalin III heavy tank chassis, while newer versions are carried on the 8-wheeled MAZ 543 vehicle.

Currently the largest in-service weapon in the rocket armoury of the Soviets is Scaleboard — although firm details of performance are very sparse. Like Scud, it is carried on the MAZ-543 launching vehicle.

Soviet surface-to-surface missiles

Key

I Fuel
II Length in metres
III Warhead diameter in metres
IV Lift-off weight in tons
V Range in kilometres
VI Launcher vehicle
VII Vehicle length in metres
VIII Vehicle width in metres
IX Vehicle height (with rocket) in metres
X Loaded vehicle weight
XI Engine hp
XII Max speed (km/h)
XIII Road range in kilometres

Frog 7: I solid **II** 9.1 **III** 0.55 **IV** 3.0 **V** 50/60 (31/37 miles) **VI** ZIL 135 **VII** 10.7 **VIII** 2.8 **IX** 3.6 **X** 20 **XI** 2 × 180 **XII** 65 (40 mph) **XIII** 500 (310 miles).

Scud B: I liquid **II** 11.35 **III** 0.86 **IV** 6.3 **V** 280 (174 miles) **VI** IS-III **VII** 6.65 **VIII** 3.05 **IX** 3.30 **X** 38 **XI** 550 **XII** 34 (21 mph) **XIII** 190 (118 miles).

Scud B: I liquid **II** 11.35 **III** 0.86 **IV** 6.3 **V** 280 (174 miles) **VI** MAZ 543 **VII** 12 **VIII** 3.02 **IX** 3.08 **X** 32 **XI** 525 **XII** 70 (43 mph) **XIII** 500 (310 miles).

Soviet surface-to-air missiles

Key

1 Year of introduction
2 Range in kilometres, Ground/Air-to-Air
3 Length in metres
4 Diameter in metres
5 Weight in tons
6 Fuel 1st stage/2nd stage
7 Guidance system
8 Speed (Mach)
9 Towing vehicle

*Front and army level weapon.
**Divisional level weapon.

Guideline (SAM 2)*: 1 1957 **2** 40 (25 miles)/18 (11 miles) **3** 10.9 **4** 0.66 **5** 2.2 **6** solid/liquid **7** radio and self seeking (infra red) **8** 3.5 **9** SIL-151 or 157.

SAM 2 (modified)*: 1 1960 **2** 40 (25 miles)/24 (15 miles) **3** 10.5 **4** 0.5 **5** 2.5 **6** solid/liquid **7** ? and self seeking **8** 3.5 **9** SIL-151 or 157.

Griffon (SAM 3): 1 1963 **2** 150 (93 miles)/40 (25 miles) **3** 16 **4** 0.9 **5** 8 **6** solid/liquid **7** laser ? **8** URAL-375D.

Gannef (SAM 4): 1** 1964 **2** 80 (50 miles)/24 (15 miles) **3** 8.5 **4** 0.9 **5** 2 **6** solid/ramjet **7** laser ? **8** 2.5 **9** modified PT-76.

Gainful (SAM 6): 1** 1967 **2** 30 (19 miles)/16 (10 miles) **3** 5.8 **4** 3.33 **5** 0.68 **6** solid/nil **7** infra red **8** 2.5 **9** modified PT-76.

Galosh (SAM 7): 1 1969 **2** 300 (186 miles)/? **3** 19 **4** 2.5 **5** 15+ **6** ?/? **7** Fully automatic **8** ? **9** MAZ.

Note: A SAM 2 battery consists of six firing ramps, 12 SAM 2 missiles, command (including radar and support vehicles and towed generators). Within 15 minutes all 12 missiles can be fired.

Engineer equipments

To support their doctrine of rapid advances against the enemy, the Soviets have developed a well-thought-out and very effective array of bridging and mine laying and clearance equipments.

Mine laying equipment (apart from the rifleman's bare hands) comes in two versions, one towed by an APC and known as the PMR-60 and the other a tracked, armoured vehicle. These enable minefields to be laid at speeds of up to 10 km per hour. Mine clearance devices range from hand-held magnetic mine detectors through vehicle mounted arrays of the same equipment, to rollers and ploughs mounted before AFVs (T-54, T-55 or T-62) and helicopters. The Soviets are also in possession of rocket propelled explosive minefield clearance devices on the lines of the British Giant Viper.

Bridges are designed to be built quickly and this has led to the development of the TPP (Tjasholyi Pontonnyi Park or heavy pontoon park) whereby the pontoons are brought to the water by the simple expedient of backing their SIL-157, six-wheeled carriers rapidly down to the water's edge and braking sharply, whereby the pontoons slide off into the water! Each division has one set of TPP, which is sufficient to build a 150 metre long bridge of the MLC 50.

Similar launching action takes place with the TPP's larger counterpart, the PMP (Plitnyi Mostoroj Park or Platform Bridge Park). A set consists of 16 central pontoons and two end sections which make up into a 120 metre MLC 50 bridge in only 36 minutes. It is held at army and front level and requires 22 six-wheeled JAAS-214 vehicles to move it. When on the vehicles, the pontoons, in four hinged sections, are folded up like a letter 'W'. When launched into the river they unfold automatically into a flat platform. At divisional level sufficient PMP sections (four or five) are held to enable a ferry quickly to be built which will carry up to 110 tons. Motive power for this ferry is provided by motor-boats such as the BMK-130.

An MLC 60 bridge for vehicles, consisting of two tracks or runways can be built with the TMM (Tjasholyi Mekanizirovanny Mostowoj or heavy bridging equipment). This is carried folded scissor-like on the back of a JAAS-214 lorry and is about 10 metres long. Sections can be joined together and to make a 40 metre bridge would take about 50 minutes. The TMM has been so successful that the Americans have developed a copy of it for their own army.

Similar to the TMM but only MLC 30 capacity is the obsolescent KMM (Koljeyno Mekanizirovnny Most or medium bridging equipment). Again providing just two tracks for the vehicle wheels, each section of KMM is about 7.5 metres long, and five sections can be joined together (as with the TMM) to bridge 35 metres in about 20 minutes. The KMM may be carried either on a SIL 151, SIL 157 or on the AT-L tractor.

Armoured bridgelayers appear in the form of the T-54 and T-55 MTU, both MLC 50, the former having a 10.5 metre span, the latter covering 17.8 metres. Launching time in each case is between two and ten minutes.

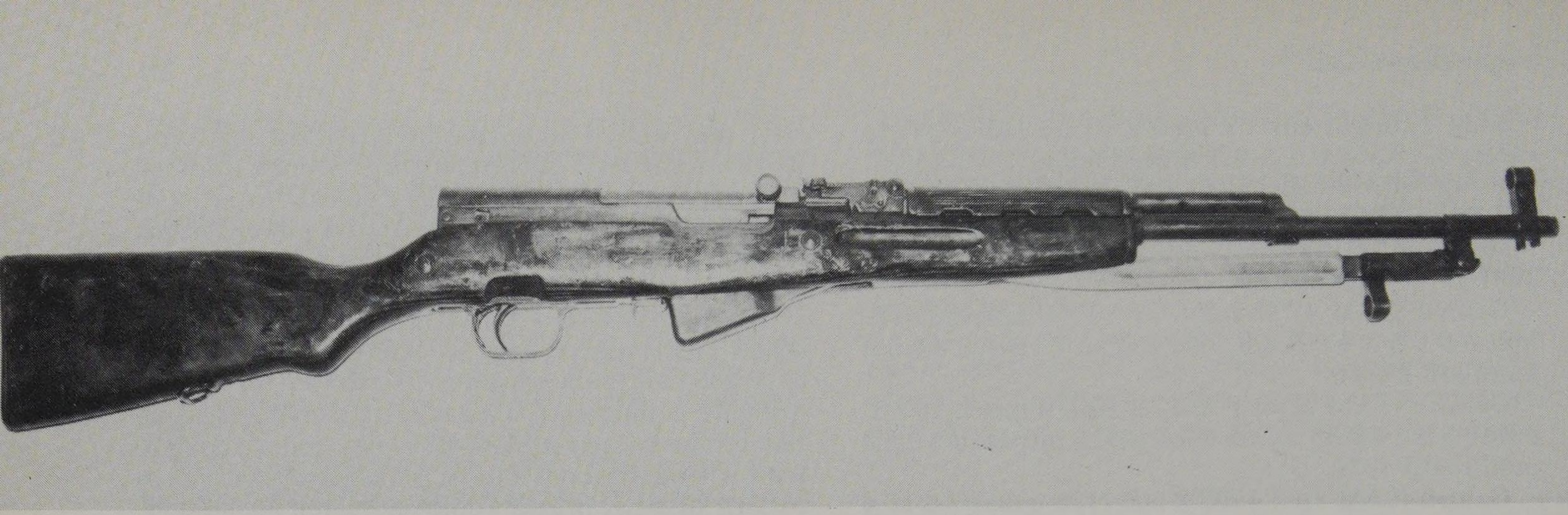
Ferries

Apart from the PMP Ferry already mentioned above, the Soviets use the GSP (Gusenitschnyi Samochodnyi Parom) or tracked, self-propelled ferry at divisional level. Consisting of two halves, each mounted on a PT-76 chassis, this ferry has a capacity of 52 tons and it requires four minutes in the water to unfold and couple up the two vehicles.

Next in line of amphibious engineer vehicles is the PTS-M, a tracked vehicle capable of lifting 18 tons or 72 men. This is followed by the old K-61 tracked ferry with a lift of 9.5 tons or 35 men. Both these equipments may tow the PKP two-wheeled amphibious trailer in which field guns can be carried.

All Soviet engineer units still use the BAW (Bolschoj Plavajuschtschij Avtomobil) or Heavy Amphibious Vehicle which is a direct copy of the famous DUKW, the American World War 2 vehicle. A four-wheeled amphibious Jeep, the MAW (Malyi etc) or Light Amphibious Vehicle is used by reconnaissance units.

Soviet engineers employ frogmen to carry out reconnaissance of the beds of rivers it is proposed to force and these men will seek out the best available entry and exit points and explore the profile and nature of the river bottom.



Above *Soviet SKS (Simonov) 7.62 mm self-loading rifle. Note the permanently attached bayonet folded under the barrel* (T. Gander).
Above right *A Roschnoi Pulemet Degtjarewa (RPD) 7.62 mm Soviet LMG. The drum magazine fits under the breech; the bipods at the front of the barrel have been folded into the carrying position* (T. Gander).

Mechanical earth moving and digging equipment is also held by engineer units to speed up the process of digging-in in case of nuclear attack, to build roads and create river entry and exit points, or to make or clear obstacles.

Infantry personal weapons

Pistols

PM (Pistolet Makarow): 9 mm calibre with an 8-round magazine; 20 rpm; weight — 0.73 kg; range — 25 m; Muzzle velocity — 315 m/sec.

APS (Automatitscheski Pistolet Stetschkin) 9 mm calibre, 20-round magazine, the wooden holster can be used as a butt, range up to 100 m. Rates of fire — single shot — 40 rpm; automatic — 90 rpm. Weight — 1.78 kg; Velocity — 340 m/sec.

Tokarev TT33 pistol: 7.62 mm Type P; Length 19.3 cm (barrel 11.4 cm); Weight — 0.8 kg; Range — 50 m; Recoil operated; Velocity — 420 m/sec; 8-round magazine in butt. Hungary manufactured a version for Egypt known as the 'Tokagypt').

Machine pistols (sub-machine-guns)

PPSH (Pistolet-Pulemet Schpagin): 7.62 mm calibre, 900 rpm, blow-back mechanism with either a 71-round drum or a 35-round bar magazine, range up to 100 m. This is a World War 2 vintage weapon and is produced in Hungary under the designation of the M-48 machine pistol. Muzzle velocity — 335 m/sec.

Carbines

SKS (Samosarjadvij Karabin Simonowa) or self-loading carbine: 7.62 mm calibre, range up to 400 m; gas recoil mechanism with a 10-round magazine. This weapon fires single shots or bursts; 40 or 95 rpm. Weight — 3.8 kg with empty magazine; Velocity — 735 m/sec.

SKD (Samosarjadvij Karabin Dragunow or Snayperskaya Vintovka Dragunova): This is a sharp-shooter's weapon and is equipped with telescopic sights. It has a 10-round magazine and a theoretical rate of fire of 30 rpm. Effective range up to 1,300 m. Weight — 4.3 kg; Velocity — 830 m/sec.

AK-47 (Automat Kalaschnikova): This is the main basis of the Soviet small arms family and has several variants within other Warsaw Pact states. The original Kalaschnikov appeared during World War 2 and was so admired by the Germans that they modelled their Sturmgewehr on it. Calibre — 7.62 mm; gas recoil mechanism, 600 rpm, 30-round magazine; range up to 400 m; weight — 3.8 kg. The bayonet of the AK-47 has a saw-toothed back and, together with its sheath, can be transformed into a wire cutting device of somewhat questionable efficiency. Velocity — 710 m/sec.

Light machine-guns

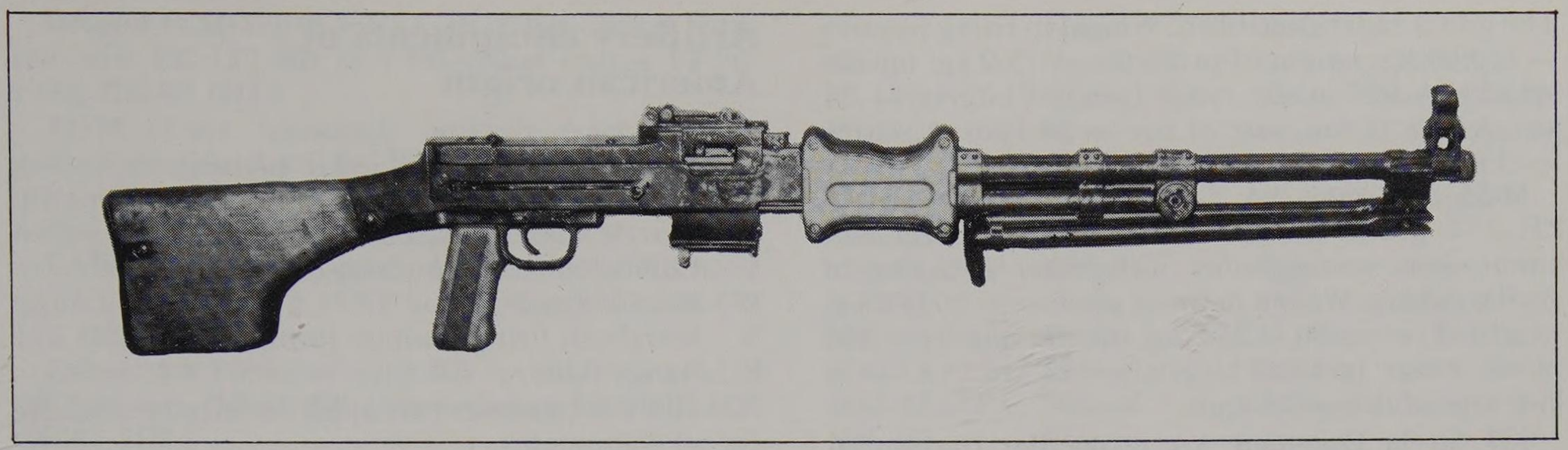
RPK (Roschnoi Pulemet Kalaschnikova): Basically this is an elaboration of the AK-47 having a longer barrel with bipod legs and capable of taking either a 40-round bar magazine or a drum magazine with 75 rounds. The butt is also heavier than that of the AK-47. Rate of fire — 600 rpm; range up to 800 m; weight (empty) — 5.6 kg; Velocity — 740 m/sec.

RPD (Roschnoi Pulemet Degtjarewa): 7.62 mm calibre; effective range up to 800 m; gas recoil action, 650 rpm with a 100-round belt/drum magazine. The barrel has bipod supports. Weight (empty) — 6.58 kg; Velocity — 740 m/sec.

RP-46D (Degtjarew): An obsolescent weapon having the same characteristics as the RPD except range — 1,000 m, and belt/drum magazine capacity 250 rounds. It has been replaced at company level by the RPD.

Heavy machine-guns

SGM (Stankovy Gorjunow Modernizovannyi): M-49. Calibre — 7.62 mm; gas recoil action; range up to



1,200 m; 650 rpm, belt fed (250 rpb); tripod mounted with flash eliminator on the muzzle. The gun weighs 13.6 kg empty and the tripod 13.9 kg; Velocity — 800 m/sec.

SG-43: This is a well known World War 2 weapon with an oval topped shield and two small wheels to facilitate its movement; it is now only rarely to be seen. Calibre — 7.62 mm; effective range — 1,200 m; gas recoil action; 650 rpm, belt fed (250 rpb); weight of empty gun — 13.8 kg, weight of wheeled shield — 26.9 kg; Velocity — 800 m/sec.

D Sh K (Degtjarew-Schpagin): This 12.7 mm weapon is the standard anti-aircraft machine gun mounted on Soviet AFVs. Weight — 52 kg; range — 1,500 m; gas recoil action; 125 rpm, belt fed (50 rpb); Velocity — 860 m/sec.

KPV (Wladimirow): With a calibre of 14.5 mm, this is the heaviest Soviet machine-gun. It is mounted on the T-10 tank, the BTR 60PB APC and the BRDM-2 scout car. Weight — 52.5 kg; 150 rpm; belt fed, gas recoil action; range — 2,000 metres.

14.5 mm Vladimirov (KPVT) MG: This new heavy MG is replacing the 12.7 mm MGs until now mounted on the Soviet APCs. Ammunition types include AP and incendiary; range — 1,500 m; rate of fire — 600 rpm.

Anti-aircraft weapons

ZPU-2 (Zenito Pulemetnaja Ustanovka): Twin 14.5 mm MGs either mounted on a two- or four-wheeled trailer or on certain APCs (BTR 152). Weight of equipment — 400 kg; muzzle velocity — 1,000 m/sec; range — 1,200 m; rate of fire — 2 × 600 rpm. Optical control; 360° traverse.

ZPU-4: As for ZPU-2 but: weight — 953 kg; rate of fire — 4 × 600 rpm.

ZU-23-2: Anti-aircraft machine-guns. Twin 23 mm MGs mounted on a towed, four-wheeled chassis; weight in firing position — 950 kg; muzzle velocity — 970 m/sec; range — 3,000 m; rate of fire — 2 × 1,000 rpm. This same AAMG is used in the ZSU-23-4 AA tank.

S-60: 57 mm AA Gun (also known as the M-50). Single-barrelled weapon on four-wheeled trailer (rather like the western Bofors 40 mm AA Gun), 360° traverse; weight in firing position — 1,816 kg; muzzle velocity — 1,000 m/sec; range — 15 km (4 km against flying targets); rate of fire — 120 rpm; ammunition types — HE (with tracer)), HESH and KE. This weapon is radar controlled and uses the same barrel and ammunition as the M-43 and M-55 anti-tank guns, the SU-57 AA tank and the ASU-57 air portable SP gun. The prime mover is usually the ZIL-157 truck.

ZSU-23-4 (Zenitnaja Samochodnaja Ustanovka): Self-propelled anti-aircraft MG. A cluster of four 23 mm MGs with target tracking radar mounted on a variation of the PT-76 chassis. Weight — 15 tons; engine — 240 hp, diesel; crew — 3; length — 6.5 m; height to top of turret (excluding radar antennae) — 2.2 m; width — 3.15 m. Employment — in the AA companies of armoured regiments and of GANNEF sites. This is a modern equipment which complements the old SU-57 equipments of the AA regiments in armoured divisions.

SU-57 (Samochodnaja Ustanovka): Self-propelled vehicle. First introduced into service in 1957, this equipment has been seen in most Warsaw Pact countries as well as in Egypt. It (the gun) is optically controlled. Weight — 35 tons; engine — 520 hp diesel; crew — 6; length — 6.2 m; height — 2.75 m; width — 3.27 m; muzzle velocity — 1,000 m/sec; rate of fire — 15 rpm; range — 8.4 km; road speed — 50 km/h; road range — 350 km.

M-44 85 mm AA Gun: Mounted on a four-wheeled trailer, this heavy AA gun has radar control. Weight in firing position — 4,300 kg; weight of projectile — 9.75 kg; muzzle velocity — 792 m/sec; range (ground targets) — 15.5 km, AA — 9.4 km; rate of fire — 20 rpm. Prime mover — ZIL-157.

M-49 100 mm AA Gun: As with the previous weapon, mounted on a four-wheeled trailer pulled by a ZIL-157. It uses the same barrel and ammunition as AT guns, tank and tank hunter guns of this calibre.

The gun is radar controlled. Weight in firing position — 11,000 kg; weight of projectile — 15.9 kg; muzzle velocity — 900 m/sec; range (ground targets) — 21 km, AA — 11 km; rate of fire — 20 rpm. An army level weapon.

M-55 122 mm AA Gun: Four-wheeled trailer, ZIL-157 prime mover, radar control, barrel and ammunition commonality with other weapons of similar calibre. Weight in firing position — 30,000 kg; weight of projectile — 25.5 kg; muzzle velocity — 800 m/sec; range (ground targets) — 20 km, AA — 15 km; rate of fire — 15 rpm.

SS7 Strela One-man AA projectile: Introduced into service in the Warsaw Pact states in 1967, the weapon resembles the American Bazooka but is longer and slimmer. The missile is an infra red weapon like the American Redeye and homes in on heat sources. Calibre is about 100 mm; weight of the missile about 10 kg; length — 1.4 m; slant range — 3.7 km; max speed — 1.5 mach.

Swedish-produced weapons

Carl Gustav M45B SMG: 9 mm parabellum; Length — 81 cm (55 cm stock folded; barrel 17.8 cm); Weight — 3.4 kg; Range — 150 m; Blowback operated; Burst, 600 rpm; Velocity — 365 m/sec; 36 round box magazine. In service with Egyptian forces where (manufactured under licence) it is known as the 'Port Said'.

Yugoslav-produced weapons

M68 Medium Mortar: 81 mm; Length — 164 cm; Barrel weight — 16 kg; Bipod weight — 13 kg; Range — 90-4,800 m, 25 rpm. HE, smoke and illumination. In service with some ME countries.

Wheeled vehicles

Key
SS Weight in kilos Empty/Loaded
TT Length/Width/Height in metres
UU Max. road speed in km/h
VV Road range in km

Landrover ¼ ton Mk VIII (4 × 4): SS 1,526/2,027 **TT** 3.8; 1.7; 2 **UU** 75 (46 mph) **VV** 570 (354 miles).

Landrover ½ ton Mk I (4 × 4): SS 1,409/1,997 **TT** 3.7; 1.6; 2 **UU** 75 (46 mph) **VV** 570 (354 miles).

Landrover ¾ ton Mk XI (4 × 4): SS 1,675/2,620 **TT** 4.6; 1.7; 2 **UU** 75 (46 mph) **VV** 448 (278 miles).

Bedford (4 × 4): SS 4,889/9,470 **TT** 6.6; 2.4; 3.4 **UU** 75 (46 mph) **VV** 586 (364 miles).

Stalwart (6 × 6) (high mobility load carrier): SS 8,464/13,009 **TT** 6.2; 2.5; 2.5 **UU** 70 (43 mph) **VV** 380 (236 miles). Amphibious.

Artillery equipments of American origin

Key
S Length, width, height (all in metres)
T Number in crew
U Muzzle velocity (m/sec)
V Combat ammunition load (rounds)
W Rate of fire (rpm)
X Weight in firing position (tons)
Y Range (km)

Not all these headings may apply, or may be available for all equipments.

203 mm M55 armoured SP howitzer: S 8.26; 3.56; 3.56 **T** 10 **U** 594 **V** 10 **W** 1 **X** 44 **Y** 17 (10 miles). Divisional artillery weapon, six per battery. Twelve-cylinder, air cooled, 810 hp 'Continental' engine; consumption 545 litres/100 km; max. road speed 48 km/h (30 mph); road range 250 km (155 miles); tank capacity 1,440 litres; wades 1.22 m. Enclosed firing compartment.

175 mm M107 SP howitzer: S 11.3; 3.15; 3.47 **T** 10 **U** ? **V** 2 **W** 1 **X** 27 tons **Y** 32.5 (20 miles). Divisional weapon, open firing compartment, tracked chassis. Eight-cylinder, water cooled diesel engine; max. road speed 55 km/h (34 mph); road range 720 km (447 miles); tank capacity 1,135 litres.

203 mm M110 SP howitzer: S 7.47; 3.15; 2.94 **T** 10 **U** 594 **V** 2 **W** 1 **X** 26 tons **Y** 16 (10 miles). Divisional weapon; similar chassis to above; eight-cylinder, water-cooled diesel engine; max. road speed 55 km/h (34 mph); road range 720 km (447 miles); tank capacity 1,135 litres; wades 1.06 metres.

Summary of those anti-tank projectors and guided weapons originating in the West which are now in use in the Middle East

Key
AA Country of origin and year into service
BB Guidance system
CC Calibre (mm)
DD System weight (kg)
EE Warhead type and weight in grammes
FF Anti-tank combat range (metres)
GG Speed (metres/sec)
HH Crew

Carl Gustav (FFV 550 Mk 1): AA Sweden **BB** none (optical) **CC** 84 **DD** 14.2 **EE** hollow charge, HE, 450, illuminating **FF** 450 **GG** 350 **HH** 2.

Vigilant: AA United Kingdom 1970 (BAC) **BB** optical, wire **CC** 131 **DD** 18 **EE** hollow charge **FF** 200-1,300 **GG** ? **HH** 2.

Swingfire: AA United Kingdom 1970 (BAC) **BB** optical, wire **CC** 170 **DD** 10 **EE** hollow charge **FF** 150-4,000 (300-4,000 in remote mood) **GG** 190 **HH** 1-3.

Dragon (XM-47): AA USA 1972 **BB** optical, infra red, wire **CC** 123 **DD** 13.5 **EE** hollow charge **FF** 30-1,000 **GG** 95 **HH** 1.

TOW (Tube launched, optically tracked, wire guided missile): **AA** USA 1970 (Hughes) **BB** optical, infra red, wire **CC** 152 **DD** 76 (3 × one-man loads) **EE** hollow charge **FF** 65-4,000 **GG** 277 **HH** 3.

LAW (Light AT weapon): **AA** USA 1972 **BB** none (optical) **CC** 66 **DD** 3.14 **EE** hollow charge **FF** 250 **GG** 145 **HH** 1.

Cobra: AA West Germany **BB** optical, wire-guided **CC** 100 mm **DD** 10 **EE** hollow charge **FF** 400-2,000 **GG** 83 **HH** ?

Designations and NATO code names of Russian aircraft

No	Name	Role
An-12	*Cub A, C*	4-engined transport, ECM
An-14	*Clod*	2-engined light, GP
An-22	*Cock*	4-engined transport
An-24	*Coke*	2-engined transport
An-26	*Curl*	2-engined transport
An-30	*Clank*	2-engined air survey
Be-12	*Mail*	2-engined MR amphibian
Il-14	*Crate*	2-engined transport
Il-18	*Coot*	4-engined transport
Il-28	*Beagle*	light bomber, recce, ECM
Il-28 UTI	*Mascot*	bomber trainer
Il-38	*May*	4-engined ASW, MR
Il-62	*Classic*	4-engined transport
Il-76	*Candid*	4-engined transport
Ka-25	*Hormone*	ASW GP helicopter
Ka-26	*Hoodlum*	light helicopter
L-29	*Maya*	trainer
Li-2	*Cab*	2-engined transport
Mi-1	*Hare*	light helicopter
Mi-2	*Hoplite*	GP light helicopter
Mi-4	*Hound*	transport and ASW GP helicopter
Mi-6	*Hook*	heavy transport helicopter
Mi-8	*Hip*	transport helicopter
Mi-10	*Harke*	flying crane helicopter
Mi-12	*Homer*	heavy GP helicopter
Mi-14	*Haze*	ASW helicopter
Mi-24	*Hind*	assault helicopter
MiG-15	*Fagot*	FGA
Mig-15 UTI	*Midget*	fighter trainer
MiG-17	*Fresco*	FGA interceptor
MiG-19	*Farmer*	FGA
MiG-21	*Fishbed*	MRFA
MiG-21 UTA	*Mongol*	fighter trainer
MiG-23	*Flogger A, B, C, E*	interceptor
MiG-25	*Foxbat*	interceptor, recce
MiG-27	*Flogger D, F*	FGA
Mya-4	*Bison*	LR bomber, tanker
Su-7	*Fitter A*	FGA
Su-7 BUTI	*Moujik*	fighter trainer
Su-9	*Fishpot B*	interceptor
Su-9U	*Maiden*	fighter trainer
Su-11	*Fishpot C*	interceptor
Su-15	*Flagon*	interceptor
Su-17/-20/-22	*Fitter C*	FGA
Su-19	*Fencer*	FGA
Tu-?	*Backfire*	medium bomber
Tu-16	*Badger*	medium bomber, MR, ECM, tanker
Tu-22	*Blinder*	medium bomber, recce, ECM
Tu-28P	*Fiddler*	interceptor
Tu-95	*Bear*	LR bomber
Tu-104	*Camel*	2-engined transport
Tu-114	*Cleat*	4-engined transport
Tu-126	*Moss*	AB controller
Tu-134	*Crusty*	2-engined transport
Tu-154	*Careless*	3-engined transport
Yak-?	*Mandrake*	LR recce
Yak-11	*Moose*	trainer
Yak-18	*Max*	trainer
Yak-18A/P	*Mouse*	fighter trainer
Yak-25	*Flashlight A-D*	FB recce, interceptor
Yak-26	*Mangrove*	fighter recce
Yak-28	*Brewer*	FGA, recce, ECM
Yak-28P	*Firebar*	interceptor
Yak-28U	*Maestro*	trainer
Yak-30	*Mantis*	trainer
Yak-36	*Forger*	VTOL FGA
Yak-40	*Codling*	3-engined transport

RECENT EVENTS

The situation in the Middle East changes rapidly. This is a summary of the latest situation just before this book went to press.

Arab-Israeli peace negotiations

Despite the activity of Western diplomats no further progress had been made and on July 22 1978 Egypt expelled the Israeli Military Mission (which had been in the country for nine months) and cut the telephonic links between the two countries. The Israelis seemed to be unable to respond to Sadat's peace initiative although signs of Cabinet disunity became visible when Defence Minister General Weizmann, a 'dove' keen on a peace settlement based on Egyptian proposals, openly disagreed with his colleagues over the hard Israeli line.

On July 22 President Sadat formed his own political party thus giving Egypt four including the Arab Socialist Union which was founded by Nasser and until 1976 was the only party in the country. Sadat also announced that Egypt's MiG 17s and MiG 21s would be replaced by Mirage and F-5 fighters with the aim of Egypt producing her own fighter aircraft by 1980.

A happy moment on the north lawn of the White House as Egyptian President Anwar as Sadat, President Carter and Israeli Prime Minister Menachem Begin shake hands after signing the Middle East peace treaty (Popperfoto).



The peace initiative was encouraged by President Carter and tripartite talks were held in March 1979 at Camp David, USA, during which the old antagonists were patiently urged along the difficult road to peace. These talks proved inconclusive and Mr Carter gambled his political reputation by embarking on an unprecedented 'peace shuttle' between Jerusalem and Cairo later that month which culminated in Israel and Egypt signing a peace treaty on the lawn of the White House in Washington on March 26. The treaty was passed (not without protests) by both countries' parliaments and was finally ratified on April 25. As a result of the peace talks, the heads of 19 Arab states, both radical and conservative, met in Baghdad and agreed, firstly, to break relations with Egypt and then to take certain further action, the complete scope of which is not yet clear. Yasser Arafat, head of the PLO, was present but stormed out of the meeting claiming that it had not gone far enough.

Israel was to hand back Sinai, including the oilfields at El Tur within three years; within ten months the two countries were to exchange ambassadors and the United States would donate considerable financial and military aid to both Israel and Egypt. The thorny problems of Arab autonomy in the Gaza Strip and on the West Bank of the Jordan remained unresolved as did the problem of the PLO.

Israel's Foreign Minister, General Moshe Dayan, hinted on April 16 that Israel would attempt a peaceful renegotiation of sovereignty of the Golan Heights with Syria.

On April 25 the United Arab Emirates broke off diplomatic relations with Egypt and Iran followed with the same gesture on April 30; the same day that the first Israeli ship to use the Suez Canal for 25 years, the *Ashdod,* entered that historic waterway bound for Haifa.

An interesting sidelight to the Arab-Israeli conflict flickered on April 13 when vital parts of a nuclear reactor (being built by the French near Toulon for Iraq) were destroyed, reputedly by Israeli agents. Libya too was known to be trying to acquire nuclear technology for military purposes.

Ethiopia

On May 26 1978 a Russo-Cuban inspired coup failed; the apparent aim was to put Dr Negede Gozeze at the head of a new and malleable regime, possibly with the object of achieving a negotiated settlement of the Eritrean problem — a suggestion the rebels rejected.

During the latter half of 1978 the Derg launched a series of heavy assaults against the rebels in Eritrea (apparently without using Cuban or Russian troops for combat purposes) and regained control of most of the territory. A force of 115,000 troops with tanks and artillery was used and it was logistically maintained by air as well as by road. Mendefera (or Adi Ugru) fell to the Derg on July 13 1978 as did Massawa; Umm Magar (on the Sudanese border) on July 17, Tessenai and Adi Quala (south of Asmara) on July 25 and Agordat on August 9. Barentu was retrieved from the rebels' siege on July 31 and the Asmara-Addis Ababa highway was reopened on July 27. Keren successfully resisted all government attacks, however, and Kenya (which supported the Derg) gave government losses in this action alone as 7,000 killed.

By August 1 further advances had been made on Massawa. Yasser Arafat was cast in the unlikely role of peacemaker, trying to stop the fighting. It was estimated that there were 13,000-15,000 Cuban troops in Ethiopia although their support for Derg genocide in Eritrea was extremely limited as they had trained Eritrean guerrillas to fight against Haile Selassie.

On April 7 1979 an estimated 17,000 Cubans and 60,000 Ethiopian troops were said to be engaged in renewed fighting in the Ogaden desert against the Somali-backed Western Somali Liberation Front, by then regrouped after its defeat there in March 1978.

Russian General Vasily Petrov in Jijiga commanded the Ethiopian offensive. The Soviets were said to be willing to assist the Ethiopians in the construction of 20 dams on the upper Blue Nile which might deprive Egypt and the Sudan of up to 30 per cent of the river's water. In return for this technical aid, Soviet naval bases would be set up at Massawa, Assab and on the Dahlak islands.

Lebanon

The Israeli Army remained in the southern part of the country until June 15 1978 and on withdrawing handed over control of large areas to the pro-Israeli Christian Lebanese Militia and not to the UN Peace-Keeping Force as had been expected. On July 23 the Syrian 'Peace-Keeping Force' in northern Lebanon shelled Christian positions in Beirut after renewed inter-sectarian strife had broken out on July 9.

The Moslem-recruited, Syrian-controlled Lebanese Army attempted to enter the Christian Militia-held areas south of the Litani river on July 31 but were driven out by Christian shellfire. It would seem to be merely a matter of time before a de facto partition of this unhappy country is arranged.

The largely Syrian 'Arab Peace-Keeping Force' in the country moved openly to support the PLO guerrillas against the Falangist Christian militia who had been receiving aid and supplies from the Israelis. The Christian enclaves around Beirut came under heavy artillery bombardment in September and October 1978 with UNO cease-fires passing almost unnoticed. President Chamoun demanded Syrian withdrawal

and resigned to underline his action. Political leader of the Lebanese Christians is Pierre Gemayel; his son, Beschir, is their military commander. Israeli support includes rations, munitions, equipment, weapons and even 40 Sherman tanks.

On April 18 1979 Major Saas Haddad, commander of the Christian Militia occupying a 9-mile wide strip of territory in the south of the country up against the Israeli border, bombarded a battalion of the new Lebanese Army sent south into the strip to cooperate with the UN Forces there and prevented their entry. Following this, Haddad proclaimed the strip to be 'Free Lebanon'.

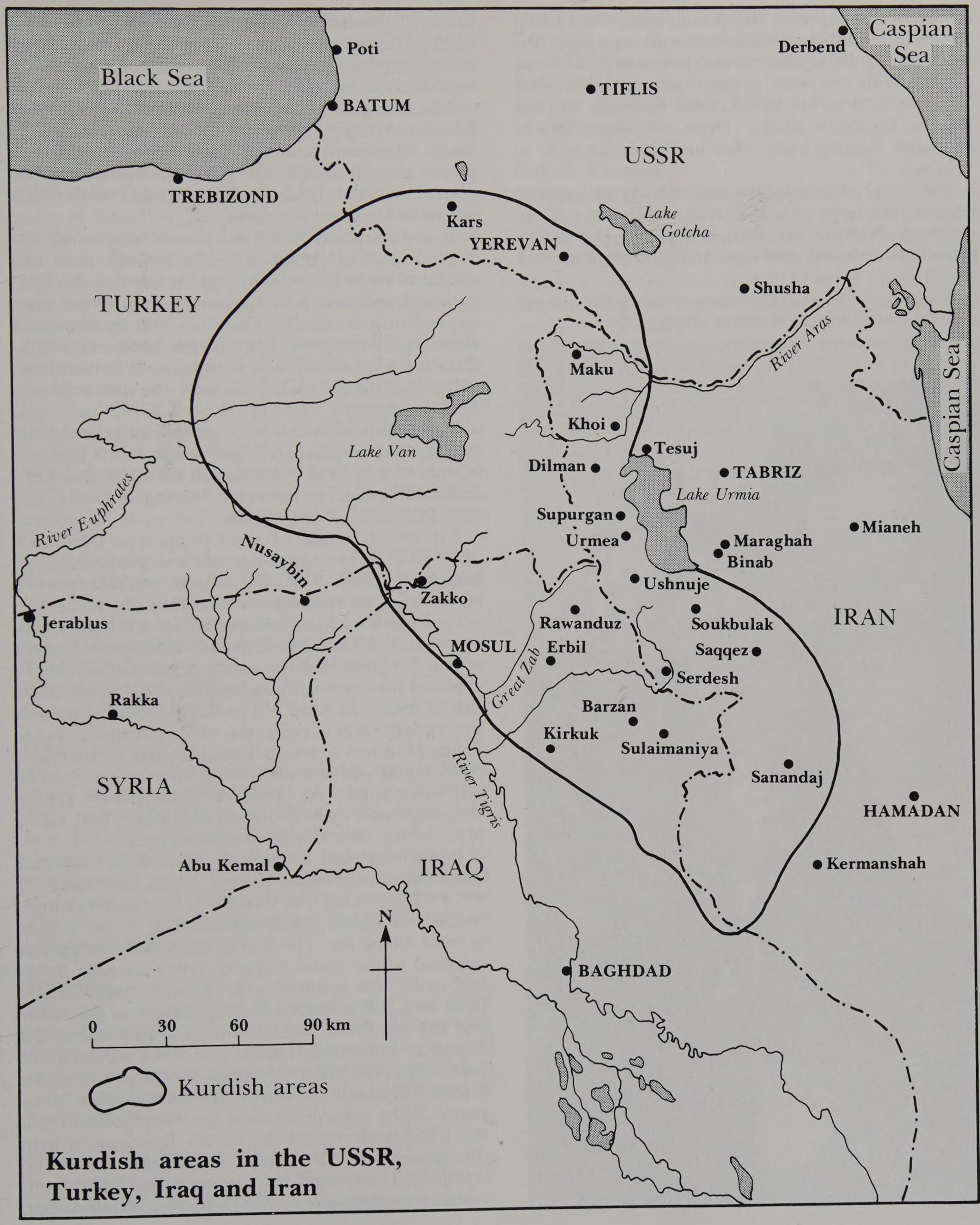
Iran

In face of mounting internal disorder, the Shah left Iran with his family on January 16 1979 and went via Egypt to Morocco where he remained as guest of King Hassan until March 30. From there he went to Paradise Island in the Bahamas. He expressed no opinions as to whether he would return to Iran but with every passing day this likelihood became more remote. He left the government in the hands of Dr Shapur Bakhtiar. The immensely influential religious leader the Ayatollah Khomeini, returning from his Parisian exile to a rapturous welcome, appointed Mr Mehdi Bazargan as *his* Prime Minister and a confrontation between the old and the new systems came closer. Following the Shah's flight, Dr Bakhtiar disbanded the secret police, SAVAK, but this appeasement was far too little and too late to affect the issue.

Civil disturbances continued and were repeatedly put down harshly by the Army, whose loyalty, however, was beginning to crumble, particularly since the Shah's hurried exit. The Air Force had showed sympathy with the popular revolution for some time and on February 9 one of their bases was attacked by the Immortals of the Imperial Guard. This sparked off three days of heavy rioting during which the Army (other than the Guard) defected to the revolution in increasing numbers. Dr Bakhtiar realised the inevitability of his defeat and handed over power to Mr Bazargan on February 11. This proved to be an academic exercise, however, as real power was already in the hands of the Moslem Ayatollahs and indeed had slopped over to the many 'Revolutionary Councils' set up by extremists in every community.

An Iranian guerilla, well entrenched in the debris of war, keeping a sharp lookout for Turkoman snipers in Gonbad-e Qavus (Popperfoto).





Kurdish areas in the USSR, Turkey, Iraq and Iran

With the collapse of the Army, even the 10,000-strong Immortals were disarmed without a fight, the mobs raided the armouries and weapons passed into the hands of extremist groups such as the Moslem Mujuheddin who are based in the mosques, and the Marxist Fedayeen Khalq. These two organisations had been fighting each other in Tehran as early as February 13.

The forces of internal law and order largely ceased to exist, prisoners were liberated and half the Army deserted. Prior to the final collapse of the Shah's regime, British and American technicians, employed in servicing and maintaining the sophisticated weapons of the Iranian Army, were withdrawn and most of these complex equipments became inoperative due to lack of attention.

Palestinian leader Yasser Arafat bestows a brotherly kiss on Iran's Ayatollah Khomeini during a meeting (Popperfoto).



The new government cancelled contracts with Britain for the Shir 11 Super Chieftain tanks using the secret Chobham Armour. They were to have been fitted with Rolls-Royce 1,200 hp engines. It was rumoured that Jordan, Saudi Arabia and China might be interested in them.

It was obviously going to take the truncated, disrupted Iranian Army years to recover from the shocks of those few months and the new Iranian Government announced that it intended to reduce arms expenditure drastically. The Shah built up his armed forces to fill the power vacuum left by Britain's withdrawal from east of Suez. It remains to be seen who will now come forward to take the place of the Iranian Army.

The demise of the Shah's regime dealt a death blow to the Central Treaty Organisation (CENTO); on March 14 Iran and Pakistan left CENTO and were followed by Turkey next day, leaving Britain as the only full member of the pact.

Exports of Iranian oil were stopped on December 26 1978 and resumed, on a much reduced scale, on March 5 1979. The full effects on the world's economy of this disruption have yet to be seen.

In the wake of the collapse of Dr Bakhtiar's government, the Ayatollah Khomeini held a referendum asking the question 'do you want an Islamic **Republic?**', received an overwhelming majority and proclaimed this new state on April 2. The Revolutionary Councils proceeded, without reference to Mr Bazargan (titular Prime Minister) to set up 'Islamic courts' which tried, condemned and executed many members of the old administration, of SAVAK and many senior Generals; well over 200 such executions had taken place by the time this book went to press.

In such turmoil it was only natural that internal secessionist movements became active. On March 19 1979 elements of the 5 million Kurdish minority broke into open revolt against the Army in and around Sananday. The Kurds are Sunni Moslems as opposed to the Shiite majority. After a week's fighting, order was restored with reported losses of 100 dead and 200 wounded, mostly Kurds, as the Army and the Air Force had been used against them. On March 27 more unrest broke out in the north-east of Iran in Turkmenistan at Gonbad-e Qavus where the Sunni Turkoman minority was agitating for autonomy. Some sources claimed that Turkomans from the USSR had crossed the border into Iran to help the separatists. The rebels evacuated Gonbad on April 2 in response to a government ultimatum; casualties were put at 50 dead and over 100 wounded.

Following the trial and execution on April 7 by an Islamic court of Amir Hoveyda (premier of Iran from 1963-77), nine 'Moslem Guards' — who replaced the demoralised and discredited police — were shot in revenge, but no one seems to be quite sure by whom.

The Ayatollah Khomeini left the government of Mr Barzargan in Tehran and withdrew to Qom, apparently feeling the strain of these hectic events. One of his religious comrades, a moderate by the name of Ayatollah Taleghani, appeared to break with the extreme nature of his leader's new Islamic state but reconciliation came about on April 18 in Qom when Taleghani pledged his loyalty in return for a promise to curb the activities of the Revolutionary Committees.

The Revolutionary Council — seat of real power in Iran and a body whose membership is a closely guarded secret — began to tackle this difficult problem. On April 23 the Forghan — Kurdish patriotic group — shot Major General Mohammed Gharani (former Chief of Staff of the Army) for his violent suppression of the Kurdish revolt in March and on May 1 they shot the Ayatollah Morteza Motahari, rumoured to be the president of the Revolutionary Council.

Some of the top men in Iran in May 1979 were: Foreign Minister — Dr Ibrahian Yazili (took over from Karium Sanjabi who resigned on April 18 in protest at the continued killings ordered by the Islamic courts). Minister of Defence — Major General Taghi Riahi; Commander in Chief of the Army — Brigadier Falahi; Chief of Staff of the Army — Major General Farbed.

Iraq

The 3 million Kurds in the country were restless about the government's policy of forcibly deporting them (over 220,000 by April 23 1979) from their homelands in the east of Iraq to the south of the country. Their place in the east was to be taken by non-Kurdish Arabs. The Pesh Merga was still intact in the area as a fighting force. Iraq was falling out with Moscow over the Kremlin's continued support for the Derg in Eritrea.

Somalia

Guerillas were active in the Ogaden in June 1978 against Ethiopian troops and on July 30 Chinese Vice Premier, Mrs Mu Hua, visited Somalia doubtless to discuss possible arms deals after Western powers had refused to fill the vacuum left by the withdrawal of Soviet military aid.

North Yemen

President Lieutenant Colonel Hassan El Ghashmi, a moderate, pro-Saudi Arabian, was assassinated by a brief-case bomb delivered by a representative of the South Yemen Government (who was also killed) on June 23. The next President was Colonel Ali Abdullah Saleh who took over from El Ghashmi. On October 17 1978 Saleh crushed a coup attempt by Marxist elements.

South Yemen

On June 26 1978 President Salem Robai Ali launched an abortive coup aimed at ousting from power Abdel Fattah Ismail, a hard-line Marxist and Secretary General of the ruling National Liberation Front. Salem Robai Ali was then executed and former Prime Minister Ali Nasser Mohamed took over his position with real power remaining with Abdel Fattah Ismail. This event was interpreted as being a move towards the Kremlin and was probably urged along by the 600 or so Cubans currently in the country. The island of Socotra (in the mouth of the Red Sea) is believed to be a haven and training ground for international terrorists including the notorious Carlos.

Three bases (Khormaksar, Al Mukalla and Socotra island) were being developed by the Soviets; Cuban troops were in the country and there was also a battalion of Ethiopian government troops there.

Yemen re-united?

Trouble broke out between the neighbouring states on March 4 1979 involving military action and Saudi Arabia declared partial mobilisation. By March 29, however, the fighting was over and the two belligerents declared their intention to unite. The first head of the new state was to be the conservative North Yemeni President Ali Abdullah Saheh; his deputy was to be South Yemen's Marxist Abdel Fatteh Ismail. However, possibilities for extended, peaceful cooperation seemed poor.

Sudan

On February 12 1979 Harold Brown, US Defence Secretary, promised to supply the country with 12 F-5 fighters, transport aircraft, tanks and other AFVs.

Saudi Arabia

April 15 1979 — King Khaled had recently undergone open-heart surgery in Cleveland Ohio; in his absence power was exercised by Crown Prince Fahd who became de facto ruler. It was rumoured that Prince Abdullah (commander of the National Guard) was trying for power with his brother Prince Sultan, the pro-American Minister of Defence who was supported by Sheikh Jamani, the Oil Minister. Prince Abdullah publicly declared his loyalty to King Khaled on April 23.

Dubai

On April 10 1978 it was announced that this Gulf State was to buy Scorpion tracked combat reconnaissance vehicles.

Inter-Arab strife

A pronounced and deepening rift has developed between Yasser Arafat's PLO and the Iraqis, resulting in several shootings in European capitals during July and August 1978. The obvious cause is the apparent readiness of part of the PLO to negotiate a peace settlement with Israel while Iraqi hard-liners refuse to contemplate any such action. A secondary motive for these killings is a power struggle within the PLO and among its various backers.

The Western Sahara

Polisario Front guerrillas, operating from Algerian bases, attacked the Moroccan Army in the disputed territory claiming 23 killed and 20 wounded. The Moroccans had 900 men deployed in Western Sahara.

Afghanistan

Although outside the original scope of this book, this Marxist state (President Noor Mohammed Tarakki seized power in a bloody coup on April 27 1978) became increasingly beset by Islamic opposition groups drawing support from Pakistan (Afghan National Liberation Front and the Islamic Revolution) and later from Iran, both Islamic Republics.

The USSR had over 400 military 'advisers' in Afghanistan and it was reported that up to 100 were killed. Afghan Moslem rebel leader Mohammed Alem claimed that up to 50,000 joined his and other groups opposed to the Marxists and the USSR increased its troop strengths on the Afghan border. It may be that the Islamic backlash will prove too strong for both Westernisation and Communism.





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The cradle of World War III? A terrifying thought, yet this is still what the Middle East—a fulcrum of violence throughout centuries—may yet become. Since 1974 the area has become a virtual proving ground for new weapon systems of ever-increasing lethality, yet this is the first book to be devoted to a detailed study of its contending forces, their aims, weapons and equipment, their organization, tactics and training, their uniforms, histories and motives. Designed for the historian, journalist, diplomat or, in fact, anyone with an interest in current affairs, it is lavishly illustrated in full color and black and white and provides graphic descriptions of the various conflicts in Iran, Israel, Lebanon, Oman, the Sinai, Yemen and other trouble spots, together with valuable technical data, much hitherto unavailable to the general student.

Front cover illustration: An Israeli M-3 half-track (Popperfoto). **Back cover illustration:** Desert training for men of the Abu Dhabi Defence Force with NATO small arms and British Landrover (Soldier Magazine).



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